SOUTHERN RHODESIA

REPORT

on the

Public Health

For the Year 1953

Presented to the Legislative Assembly

1954

PRINTED BY THE GOVERNMENT PRINTER, SALISBURY

1954

C.S.R. 22—1954.] [G.P. & S. 8924—500—6-5-54.

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Report on the Public Health for the Year 1952

To the Minister of Health,

Sir,

I have the honour to submit the Annual Report of the Department of Health for the year 1952.

I have the honour to be, Sir, your obedient servant,

R. M. Morris,

Secretary for Health.

INTRODUCTION

The year 1952 was mainly characterized by a shortage of finance which necessitated the utmost economy in every direction, nevertheless all essential services were not only maintained but in several directions considerably extended. Details of these appear in the body of this Report under the appropriate headings but it is customary and desirable to emphasise some of the main features individually in this Introduction.

Legislation

The Medical, Dental and Allied Professions Act which was passed during 1952 and became effective as from the end of the year, considerably amends the old Medical, Dental and Pharmacy Act, now repealed.

This new Act provides for a larger composite Medical Council on which are represented the medical practitioners, dental surgeons, chemists and druggists, medical and surgical nurses and midwives, but the Council also governs the practice of opticians, whose registration is now made compulsory, radiographers, physiotherapists, medical laboratory technicians, health inspectors, African nursing orderlies and hygiene demonstrators.

The arrangements for the discipline of the persons registered in the several classes of register are new in the comparative legislation of the British Commonwealth. These provisions allow the Council, after due enquiry into complaints of improper or disgraceful professional conduct, to reprimand, fine or suspend judgment on the registered person but if the Council considers that the conduct merits erasure of the name of the person from the appropriate register, the Council has to pray the High Court to do so. It is considered that this provision gives a very real measure of security to both the individual and to the public.

The Poisons. Pharmacy and Dangerous Drugs Act was passed in the same session. Whilst not interfering with wholesale dealings in poisons it is an Amending Act which should give much better control over the retail sale of poisons and the methods of storing and labelling whilst incorporating all the previous safeguards over the sale and possession of dangerous (i.e. habit-forming) drugs.

During the year the importation of Heroin in any way was forbidden, thus bringing the Colony into line with the majority of member states signatory to the International Conventions on opium and other habit-forming drugs.

In October, the new International Sanitary Regulations came into force in the Colony. The effect of these is largely in connection with passengers by air and they are designed to facilitate interstate traffic whilst still providing the essential minimum safeguards against the introduction of formidable epidemic diseases from outside the borders of the Colony. In consequence the Aviation Health Act will be repealed and replaced by an Act giving effect to the new Regulations.

Tuberculosis.

With the introduction of a regulation under the Immigration Laws requiring all new permanent residents to submit a radiologist's report of freedom from active tuberculosis, there has been a marked decrease in the number of European cases of Tuberculosis. This was to be expected as for the previous six years one half the known cases of the disease were in recently arrived immigrants.

Unfortunately in the African population the incidence of the disease continues to rise. The position has now been reached where more positive measures are necessary and there has been a demand for extensive use of specialised case-finding methods such as mass miniature radiography.

Whilst in no way questioning the very great value of such refinements in early diagnosis, a Colony-wide scheme of radiography would be a very expensive undertaking and one not easily justified till further development of treatment facilities has been undertaken. All the existing beds for Tuberculosis patients will not contain the presently known cases. Hence many are nursed in general wards of African hospitals and clinics. Such a policy would not be entirely unsatisfactory were it not for the demand for beds for other patients and hence the lack of facilities for bed isolation of the tuberculous and the lack of specialised investigation and treatment.

It has therefore been suggested that a tuberculosis scheme should be instituted and be based on outpatient clinics as an integral part of the Regional Preventive Service but backed by an immediate increase in beds for tuberculosis cases either in special institutions or in wings of existing hospitals.

These clinics could do yeoman work in tuberculin testing of the young, in giving B.C.G. to the negative reactors and in investigating those positive to a standard Mantoux Test.

Reference to the work done on a comparatively small scale in this way during 1952 is embodied in the Report.

Malaria.

The marked success of the Mazoe Valley Project in showing the value of residual insecticide spraying as a preventive of malaria has led to a wide scale application of this work throughout the Colony.

With some regretted exceptions, most local authorities are now dealing with their own areas and in several districts local associations of farmers have continued to provide a service which is showing very beneficial results. It is unfortunate that some individuals are still unwilling for various reasons to co-operate, thus leaving islands of untreated dwellings in which mosquitoes can become infected and become a menace to neighbours.

It is not without signifiance that most of the European patients now being admitted to hospital suffering from acute malaria are either persons whose duties require them to camp in primitive conditions or are non-co-operators in residual spraying. Among the Africans, generally speaking, there is much greater enthusiasm, although it is probably not primarily related to mosquito control but mainly due to freedom from bugs and cockroaches. Nevertheless, apart from the Government sponsored campaigns in native reserves in Mashonaland, many other reserves now have some organisation set up by Native Councils or by the Native Commissioner and assisted by the Local Health Inspector.

It may now be stated that approximately 400,000 persons (20 per cent. of the total population) enjoy the benefits of residual spraying.

Treatment Facilities.

Although there were at the end of the year several new institutions in course of erection, the tempo of building is still somewhat slower than could be wished. Hence it was only possible to bring into use three new institutions—the African Clinics at Lundi Reserve (six miles from Shabani),and Ngezi and Mkosa.

Considerable progress has been made with a number of others, *viz.*, a new European Maternity Block at Sinoia, European Cottage Hospital at Filabusi, African Hospitals at Salisbury and Bulawayo, Coloured and Asiatic Block at Salisbury and extensions to European hospital, Umtali.

During the year the European section of the Shamva Hospital was shut down. The number of admissions per annum over the previous three years had never exceeded 3. The African Hospital and V.D. clinic continues to be maintained and to do good work under the Government Medical Officer, Bindura.

One of the effects of pressure on bed space in all the Hospitals has been a reduction in the average duration of stay of patients. Whilst generally speaking this has been all to the good there is a risk that any further increase in this pressure will lead to patients being discharged at too early a stage of their convalescence.

District Nursing Service.

For some years it has been the practice to appoint District Nurses with general and midwifery qualifications to assist in looking after the European community in areas remote from hospitals or where such a domicilary service would obviate admission to hospital in the case of short term illnesses.

From several centres requests have been made for further appointments. It is difficult to judge the exact extent of the need except after experience and hence it has been decided to make these appointments on an experimental basis for six months in the first instance. If, during that period insufficient use is made of her services to warrant the expense, the appointment is cancelled.

Unfortunately this has had to be done on only too many occasions. The whole scheme of District Nurses has therefore to be kept constantly under review so that they may be supplied to those districts where their services are appreciated but unjustifiable expense avoided in others.

Nurse Training.

There is still a high percentage of wastage during the training of European Student Nurses but an encouraging sign has become evident during the past year. There are now more candidates for training coming forward than there are places in the two training schools.

With the enlargement of Umtali Hospital serious consideration will have to be given to the question of setting up a training school at that institution. The main difficulty at the present time is finance to provide a suitable nurses' home. The commencing preliminary training school period can well be done in Salisbury or Bulawayo.

Personal.

During the year 1952, three senior members of the Health Department retired on pension. It is desired here to place on record an appreciation of their services and to wish them happiness in their retirement.

Dr. D. O. Richards joined the Southern Rhodesia Medical Service in 1932 and was posted as Government Medical Officer, Plumtree. He subsequently served in a similar capacity in Gwanda, Amandas, Marandellas, Rusapi, Bindura and Que Que. In this latter station he was also Medical Officer of Health for the Municipality. In 1949 Dr. Richards was promoted to the rank of Senior Government Medical Officer, Que Que, where he was Medical Superintendent of the Hospital at a period of great expansion of the district. It is pleasant to record that Dr. Richards proposes to continue to practice in the Que Que area.

Miss Gladys E. Mills, M.B.E., joined the Southern Rhodesia Nursing Service in 1929 and was posted to Gwelo Hospital as a Qualified Staff Nurse, in which capacity she was transferred to Salisbury General Hospital in 1930. A year later she was promoted to Sister and took charge of the Male Medical Ward. Subsequently she was a Sister at Shamva, Gwelo and Bulawayo.

In 1937 she became Assistant Matron in Bulawayo, being later succesively Matron of Gwanda; Gatooma; Lady Chancellor Maternity Home, Salisbury; and Umtali Hospitals.

In 1944 she became Senior Matron, Bulawayo Hospitals and four years later she succeeded Miss Deacon as Staff Matron and head of the Nursing Service

Her varied experience served her in good stead in this most important post, where her innate human kindness helped to smooth over many difficulties. There are many members of her staff who will always remember with gratitude her personal interest in their affairs. The Department is happy to have her continued help as a volunteer in the Leprosy Hospital at Ngomahuru.

Miss Lily Tipping, A.R.R.C., was appointed to the Nursing Service in 1934 as a Qualified Staff Nurse and was posted to Gatooma Hospital. She later served in the same capacity in Sinoia and Bulawayo. In 1936 she was promoted to Sister and in 1943 became Matron of Gatooma Hospital. She also served as Matron of Umtali Hospital and Assistant Matron of Salisbury General Hospital. In 1947 she became Matron of the African Hospital, Bulawayo, which she administered with great skill and conspicuous success till her retirement.

During the War, Miss Tipping was Matron of the Southern Rhodesia Military Nursing Contigent operating No. 2 General (Southern Rhodesia) Hospital, Nairobi, from 1940 to 1943. In recognition of her military service, Miss Tipping was awarded the A.R.R.C.

Chapter I.—VITAL STATISTICS

(1) *Comparison with Earlier Years.*

In the report figures for 1952 are, where possible, compared with those for 1942 and 1932.

(2) *Population of Southern Rhodesia.*

The population is estimated at the 30th June in each year:—

	1952	1942	1932
Europeans	152,000	78,560	51,130
Asiatics	4,600	2,640	1,800
Coloured Persons	6,300	4,080	2,560
Africans	2,070,000	1,468,000	1,101,000
	2,232,900	1,553,280	1,156,490

(3) *Summarised Vital Statistics.*

The vital statistical information regarding the European population is given below:—

	1952	1942	1932
Estimated European population	152,000	78,560	51,130
Rate of natural increase per 1,000 of European population	22·3	14·5	13·32
Gross number of European immigrants	14,505	469	1,391
Of which R.A.F. and dependants	2,039	—	—
Number of European births	4,289	1,873	1,166
Illegitimate births included above	50	25	21
Annual birthrate per 1,000 population	28·2	23·8	22·8
Number of European deaths	904	728	485
Annual death-rate, crude	5·9	9·3	9·48
Number of infant deaths	88	75	64
Infant mortality per 1,000 live births	21	40	55
Number of still births (not included in either births or deaths	59	29	(*a*)
Number of maternal deaths	4	2	7
Maternal mortality rate per 1,000 live births	0·9	1·1	6

(*a*) Figure not available.

A new record low crude death-rate of 5·9 per 1,000 has been established. The rate of natural increase also constitutes a record at 22·3 per 1,000 as does the infant mortality rate.

(4) *European Birth Rates*

Rate per 1,000—	1952	1942	1932
Southern Rhodesia	28·2	23·8	22·8
England and Wales	15·7 (*a*)	15·6	15·3
Union of South Africa	26·4 (*a*)	25·2	24·2

(*a*) Estimated on January–September figures only.

(5) *European Infant Deaths*, 1943–1952.

Table I.—Causes of Death

Disease	*Number of Deaths*	*Percentage of Total*
Premature birth and diseases of early infancy	563	63·05
Bronchitis and Pneumonia	70	7·84
Diarrhoea and enteritis	83	9·29
Malaria	50	5·60
Measles, whooping cough, diphtheria, dysentry	23	2·57
Various, not classified above	104	11·65
Total	893	100·00

Table II.—Deaths During Different Months of Age

	Number of Deaths	*Percentage of Total*
First month	573	64·17
2 months to 6 months	187	20·94
6 months to 12 months	133	14·89
	893	100·00

TABLE III.—CAUSES OF INFANT DEATHS, 1952

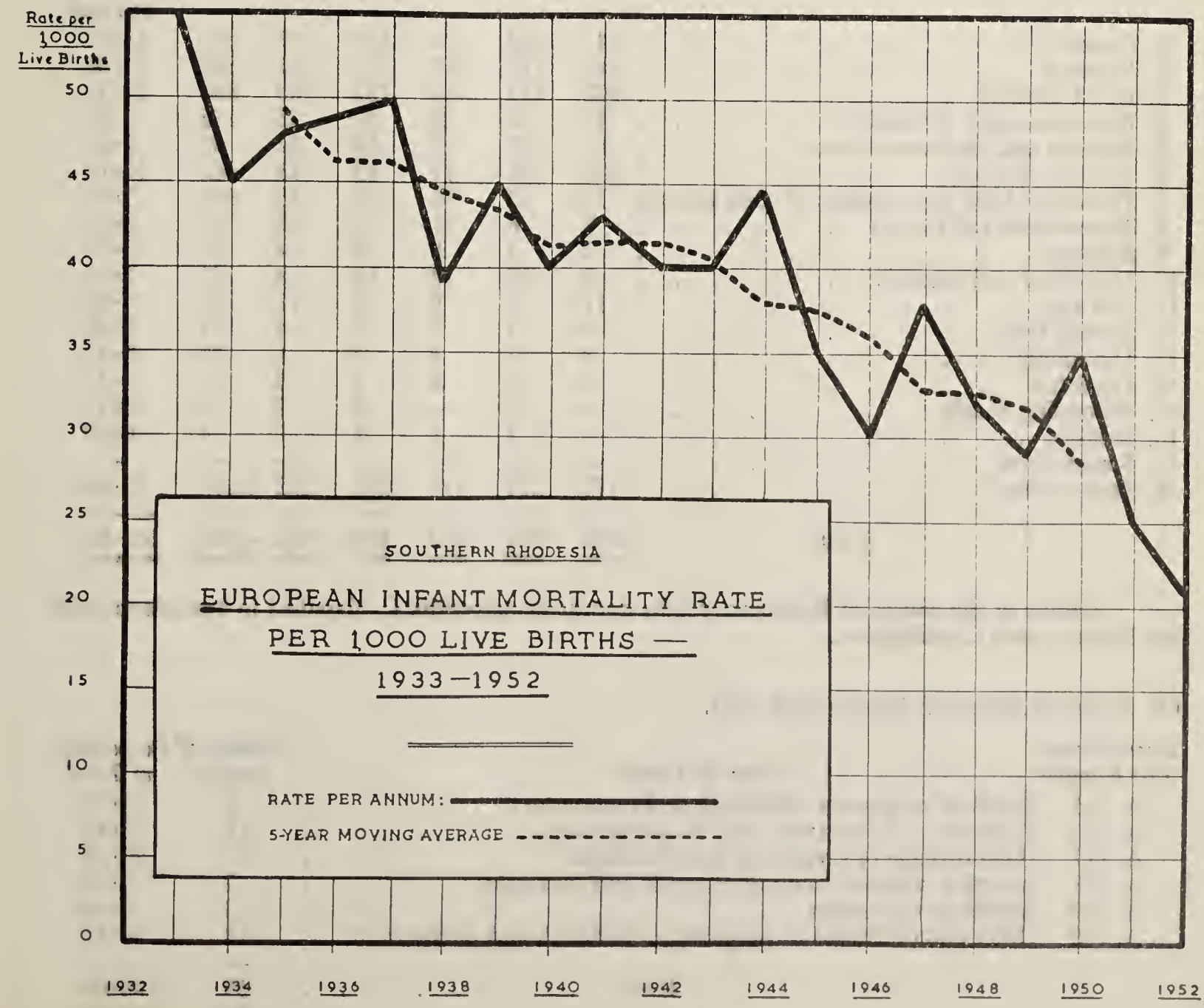
International List No.	*Causes of Death*	*Number of Deaths*
A. 2	Tuberculosis of meninges and central nervous system	1
A. 21	Diphtheria	2
A. 23	Meningococcal infections	1
A. 37	Malaria	1
A. 89	Lobar pneumonia	1
A. 90	Broncho pneumonia	7
A. 91	Primary atypical, other and unspecified pneumonia	2
A. 104	Gastro-enteritis and colitis except diarrhoea of the new-born	3
A. 128	Congenital malformations of circulatory system	6
A. 129	All other congenital malformations	1
A. 130	Birth injuries	4
A. 131	Post-natal asphyxcia and atelectasis	14
A. 132	Infections of newborn	3
A. 133	Haemolytic diseases of new-born	4
A. 134	All other defined diseases of early infancy	5
A. 135	Ill-defined diseases peculiar to early infancy, and immaturity unqualified	33
		88

TABLE IV.—EUROPEAN INFANT MORTALITY RATES, 1949–1952.

	1949	1950	1951	1952
Southern Rhodesia	29	35	25	21
England and Wales	32	30	30	27 (*b*)
Union of South Africa	38	36	34 (*a*)	35 (*a*)

(*a*) Preliminary. (*b*) Estimate based on January to September figures.

TABLE V.—EUROPEAN INFANT MORTALITY RATE PER 1,000 LIVE BIRTHS, 1933–1952



Year	*Rate*	*Year*	*Rate*	*Year*	*Rate*
1933	55	1940	40	1947	38
1934	45	1941	43	1948	32
1935	48	1942	40	1949	29
1936	49	1943	40	1950	35
1937	50	1944	45	1951	25
1938	39	1945	35	1952	21
1939	45	1946	30		

The above graph shows that whereas from 1933 to 1937 the average infant mortality was 49 per 1,000 live births, from 1948 to 1952 the average infant mortality rate had been reduced to 29 per 1,000 live births.

In comparing the ages at which infants died for these two five-year periods, from 1933 to 1937 27 deaths per 1,000 live births occurred in infants under one month of age and from 1948 to 1952 20 deaths per 1,000 live births occurred in infants of the same age; from 1933 to 1937 12 deaths per 1,000 live births occurred in infants aged from 2 to 6 months, compared with 5 per 1,000 in 1948 to 1952; and there were 10 deaths per 1,000 live births of infants aged 6 to 12 months for 1933 to 1937, compared with 4 per 1,000 in 1948 to 1952.

Thus although the proportion of deaths per 1,000 live births of infants under one month fell by one-quarter between 1933/7 and 1948/52, the proportion of deaths of infants from 2 to 12 months fell by 60 per cent. between these two five-year periods.

(6) *European Deaths.*

TABLE I.—EUROPEAN DEATH RATES PER 1,000

	1952	1942	1932
Southern Rhodesia	5·9	9·2	9·5
England and Wales	11·0 (*a*)	11·5	12·0
Union of South Africa	8·9 (*a*)	9·3	10·0

(*a*) Estimated on January–September figures only.

TABLE II.—Causes of European Deaths, 1948–1952.

	1952	1951	1950	1949	1948	*Total*	*Percentage of Total*
1. Cancer	141	163	121	129	97	651	14·97
2. Violence	114	119	113	81	81	508	11·68
3. Heart diseases	202	183	182	152	165	884	20·32
4. Pneumonia and bronchitis	46	28	28	29	35	166	3·82
5. Malaria and blackwater fever	14	17	14	18	32	95	2·18
6. Nervous diseases	106	101	77	83	75	442	10·16
7. Premature birth and diseases of early infancy	70	78	78	65	55	346	7·95
8. Tuberculosis (all forms)	8	8	11	13	23	63	1·45
9. Influenza	2	3	8	6	4	23	0·53
10. Diarrhoea and enteritis	9	10	13	10	8	50	1·15
11. Old age	11	9	9	6	11	46	1·06
12. Enteric fever	—	1	3	5	4	13	0·30
13. Diphtheria	8	1	4	4	1	18	0·41
14. Dysentry	1	2	8	2	5	18	0·41
15. Whooping cough	—	2	—	1	2	5	0·12
16. Measles	—	1	1	1	1	4	0·09
17. Scarlet fever	—	—	—	—	—	—	—
18. Other causes	172	231	190	203	222	1,018	23·40
TOTAL	904	957	860	808	821	4,350	100·00

Details of the causes of European deaths appear at Appendix C, classified in accordance with the International Classification.

(7) *European Maternal Deaths*, 1943–1952.

International List Number	*Cause of Death*	*Number of Deaths*	*Percentage of Total*
A. 115	Sepsis of pregnancy, childbirth and puerperium	9	15·26
A. 116	Toxaemias of pregnancy and the puerperium	15	25·42
A. 117	Haemorrhage of pregnancy and childbirth	12	20·34
A. 118	Abortion without mention of sepsis and toxaemia	2	3·39
A. 119	Abortion with sepsis	3	5·08
A. 120	Other complications of pregnancy, childbirth and puerperium	18	30·51
	TOTAL	59	100·00

This is a slightly different classification to that shown in previous years being amended to bring it into line with the International Classification.

(8) *African Vital Statistics.*

BIRTH, DEATH, NATURAL INCREASE AND INFANT MORTALITY RATES

The only available vital statistics regarding the African population are those obtained in the sample Census taken in 1948. Although these are four years out of date they are quoted below for purposes of comparison:—

	Births per 1,000 *persons*	*Deaths per* 1,000 *persons*	*Natural Increase per* 1,000 *persons*	*Infant Mortality per* 1,000 *Live Births*
1948	46·2	18·1	28·1	131

It is considered absolutely essential, if the money spent on the 1948 census is not to be wasted, that a further sample census of the African population should be taken in the very near future to enable the accuracy of the previous figures to be checked and to give a reliable estimate of the present position. This should be done on the same basis as before and it is very desirable that funds should be made available for a regular sample census.

Chapter II.—INFECTIOUS AND COMMUNICABLE DISEASES

(1) *Notification of Infectious Diseases.*

The improvement in the standard of notification of infectious disease has been maintained and the general situation is more satisfactory than it was three years ago.

Disease	European		Non-European	
	Cases	Deaths	Cases	Deaths
1. *Quarantinable Diseases*: (International Sanitary Regulations)				
*Cholera	—	—	—	—
*Plague	—	—	—	—
*Smallpox	—	—	87	13
*Typhus Fever (exanthematous)	—	—	—	—
*Yellow Fever	—	—	—	—
2. *Tuberculosis and Silicosis*:				
*Pulmonary Tuberculosis	28	3	959	181
*Non-pulmonary Tuberculosis	2	1	193	53
*Silicosis with Active Tuberculosis	—	—	5	3
3. *Infectious Diseases of Childhood*:				
*Chickenpox	557	—	818	—
German Measles	2	—	2	—
Measles	45	—	118	1
Mumps	27	—	25	—
Whooping Cough	13	—	366	11
4. *Virus Encephalitis Group*:				
*Acute Anterior Poliomyelitis (including Polio-encephalitis)	57	9	41	4
5. *Bacterial Infections*:				
*Anthrax	—	—	4	—
*Scarlet Fever	94	—	1	—
*Erysipelas	4	—	1	1
*Puerperal Septicaemia	—	—	9	3
*Cerebro-spinal Meningitis	10	1	300	68
Meningitis—other organisms	—	—	2	1
*Diphtheria	51	2	159	29
*Typhoid Fever	38	—	164	34
*Paratyphoid Fever	1	—	3	—
6. *Miscellaneous*:				
Relapsing Fever (tick-borne)	—	—	1	—
Trachoma	—	—	190	—
*Trypanosomiasis	1	—	7	4
*Undulant Fever	2	—	—	—

* Indicates diseases which are notifiable infectious diseases under the Public Health Act.

(2) *Malaria and Blackwater Fever.*

The actual number of admissions of malaria cases to Government Hospitals shows little change on the previous year. Fourteen deaths of Europeans were ascribed to this cause.

Reports from the various districts all emphasise the fact that most of these admissions and the deaths occur in persons who have not take adequate precautions and have neglected to have their houses sprayed with residual insecticide or to take prophylactic drugs when their affairs have taken them into rural areas under camping conditions.

On the other hand there are very good grounds for satisfaction at the results obtained when such precautions are being taken.

In the North Mashonaland area six government control units have been operating with a negligible number of cases of malaria admitted to Hospital. The Native Councils of these areas have contributed towards the costs of these units and have been on the whole very appreciative of the results. In many other areas, under the supervision of the Regional Medical Officers of Health and the Health Inspectors, organised schemes have been adopted locally by Native Councils, European local authorities, mining and agricultural organisations and Missions. Whilst these schemes unfortunately leave large islands of unprotected areas, it is calculated that some 400,000 persons or 20 per cent, of the population is now receiving the benefits of spraying.

It is to be hoped that the manifold advantages will lead to an even greater extension in future years.

Two cases of blackwater fever with no deaths were reported in Europeans during the year.

(3) *Bilharziasis.*

Six teams have continued to operate in Mashonaland native reserves and considerable work has also been done by health inspectors and hygiene demonstrators in other areas. Details are given in Appendix O. Unfortunately the control of this disease must be a long term project as it is bound up with far more than mere killing of snail vectors by molluscicides. Education in protection of water supplies and in excretory habits must also play their part. Considerable attention has been paid in the Research Laboratory to the potential part played by the schistosomes which are normally the parasites of cattle, sheep, goats and monkeys, since it is not improbable that under optimum conditions these may also be infective to man.

(4) *Tuberculosis.*

Twenty-three cases of pulmonary tuberculosis (three deaths) in Europeans and 959 cases (181 deaths) in Africans were notified. In both cases these represent a rise in the attack rate per 100,000 of population. In the case of the African this rise is about 27 per cent. on the 1951 figure. Whilst part of this may be due to better notification, the major part is undoubtedly a true index of an increasing spread of the disease. It is essential that specialized curative facilities for this disease be increased as soon as possible. The existing beds at Government and Mission Institutions are insufficient to give proper treatment to the patients and will still be so when the new Sanatorium for Africans in Bulawayo is opened next year.

Even with such provision it is also essential to do everything possible to prevent this continuing rise in incidence.

First and foremost must come better housing and better nutrition as the main features in any successful campaign, but here the Department of Health can do little more than advise and assist. On a more restricted level of personal preventive measures, the Department continued during the year with a scheme for tuberculin testing by Mantoux skin reactions and B.C.G. vaccination of negative reactors.

In all some 15,307 tuberculin tests were done on Africans. The vast majority of these were on school children. The results were of considerable interest in that up to the age of 4 years practically no positive reactors (6mm. or over of definite induration 72 hours after an intradermal injection of 0·1 cc. old Tuberculin 1/5000) were found. In the age-group 5–7 the percentage of positives was 14·7; age 8–11, 16·8 per cent.; 12–15, 22·4 per cent., and thereafter the percentage rose progressively. In a small group of African mine workers only 20 per cent. failed to give a positive reaction.

Of the total number tested, 12,179 were given B.C.G. inoculations. Subsequent tuberculin tests showed an overall conversion rate of 85·7 per cent., which is not unsatisfactory in the circumstances.

It would therefore appear probable that some benefit may be gained by a more vigorous and extended campaign among the African children up to at least the school-leaving age.

Negotiations are already in progress to persuade Medical Officers of large employers of Africans to assist in this work, but it is obvious that any real extension of the scheme in numbers will require a Colony-wide organisation integrated into the preventive work of the Regional Medical Officer of Health.

(5) *Smallpox.*

The recent epidemic abated in 1952, when there were only 87 cases in all in Africans—with 13 deaths. This compares very favourably with 1,269 cases (106 deaths) in 1951.

312,468 vaccinations were performed by Health Inspectors and their staff and by the Native Affairs Department officials during 1952.

(6) *Yellow Fever.*

Whilst no case of Yellow Fever has ever been diagnosed in the Colony, the Department of Health has been active, in collaboration with neighbouring territories, in the World Health Organisation's project to delimit the southernmost extent of yellow fever in Africa.

Specimens of blood are collected as and when opportunity arises and sent to the Special Centre for Virus Research at the S.A. Institute for Medical Research for examination.

The results of a further 766 investigations are now available and do not disclose any positives. The number of positives so far revealed therefore remains at three—one from the Zambesi area north of Wankie, one from the Zambesi area at Binga's, Sebungwe, and one from North of Urungwe.

It is not impossible that all these infections were originally from areas outside the Colony.

(7) *Leprosy.*

Statistics of the patients under treatment appear in Table A of the Appendix.

The reports of the Medical Superintendents at Ngomahuru and at Mtemwa are very encouraging as to the beneficial effects of specific therapy by sulphones. At the former institution, although the number of admissions was maintained at about the average for previous years (238), the number of patients discharged as arrested and fit to continue treatment elsewhere was 280. At the latter hospital there were 137 new patients and 101 discharges as arrested.

It is noteworthy that these results have become known to the African population over wide areas and, in consequence, patients are appearing from even more remote areas asking to be sent for " the new treatment in hospital ".

(8) *Poliomyelitis.*

An analysis of the figures for the incidence of poliomyelitis shows that whilst the disease was much less prevalent than in 1951, the experience was the third highest in the history of the Colony.

The resultant disabilities and their necessary treatment have led to widespread interest by members of the general public, with the result that special treatment and rehabilitation clinics have been set up in Bulawayo, under a joint Red Cross Society/Society for Care of Blind and Physically Defective Committee, in Gwelo by an *ad hoc* Committee and in Salisbury by the Red Cross Society. Their practical interest and very valuable assistance is gratefully acknowledged by the Department of Health.

(9) *Trypanosomiasis.*

This disease continues to be confined to the Northern portion of the Colony almost entirely in the Zambesi Valley, but the heavy rains of the last two seasons have led to a wider dispersion than usual of the vector tse-tse fly, *G. Morsitans.*

As much of this area is still very inaccessible it is impossible to state that the recorded incidence in Africans is the true picture. Therefore arrangements are in hand to carry out a special survey of one portion of the area during 1953.

Chapter III : CURATIVE SERVICES

(1) *European Hospitals.*

No new hospitals were opened during 1952, but the new cottage hospital at Filabusi should be ready for service early in 1953. Additions have been made to the Umtali Hospital of a new out-patient department, new children's wards and a new ward for females. the administrative offices of the hospital are accommodated in the new block, releasing further rooms for use as small wards. These additional facilities will be ready for opening in 1953. Alterations to Gwelo Hospital have provided a new children's ward which was brought into use during the year.

Overcrowding at certain of the larger European hospitals is rapidly becoming more and more acute. It is generally accepted that a patient-bed ratio of 80 per cent. represents full working capacity. On this basis, Salisbury General Hospital is 9·1 per cent. and Bulawayo, 2·4 percent. above saturation point. Gwelo (75·5 per cent.) and Que Que (74·5 per cent.) are giving considerable cause for anxiety in view of the rapid growth of these centres. The steps already taken will provide additional accommodation at Umtali (now 74·5 per.cent. utilised).

On the other hand Gatooma (39·7 per cent.) and Fort Victoria (31·4 per cent.) are running well below capacity, as are the smaller cottage hospitals.
Shamva Hospital (·6 per cent.) was closed during the year as it had become uneconomic.

The following figures illustrate the general position as regards European hospitals:

	1952	1942	1932
General Hospital admissions	17,932	11,997	5,369
Admission rate per 1,000 of European population	124·5	158·7	105
Average days in hospital each case	9·8	11·6	14·7
Average number of patients per hospital bed	26·6	21·8	15·3
Beds per 1,000 of European population	4·5	7·1	7·0

It will be noted that, during the past 20 years, the admission rate per 1,000 has increased by approximately 20 per cent. ; the period of stay in hospital has been reduced to two thirds; the number of beds available per 1,000 Europeans has fallen to two thirds and the average number of patients per hospital bed has increased by approximately 75 per cent.

The position regarding maternity homes has not appreciably altered since 1951. The following figures give some indication of the situation as regards existing homes.

	1952	1947
Percentage of births in maternity homes	91·4	88·8
Number of maternity beds	174	133
Beds per 1,000 live births	40·5	50
Average confinements per bed	22·5	17·9

The pressure has been most acute at the following institutions:—

	Percentage of Beds Occupied
Lady Chancellor, Salisbury	74·5
Lady Kennedy, Umtali	73·0
Lady Rodwell, Bulawayo	66·3
Birchenough, Gwelo	61·1

A new maternity home at Sinoia has been built and will provide six additional beds. A new private home with eight beds was opened at Bulawayo during the year.

Statistics concerning European general hospitals will be found in Tables D to F and maternity home figures in table H of the appendix.

(2) *District Nursing Service.*

There are 15 District Nurses on the Staff. The work done during 1952 may be summarised as follows:—

Number of homes visited	1,320
Number of home visits paid	9,510
Visits of patients to nurse	3,303
Midwifery cases	39
Vaccinations	631
Number of African out-patients treated	13,817

Owing to the failure of the public to make use of the facilities available, this service is proving unduly expensive, particularly as far as motor mileage is concerned. Outside Salisbury and Bulawayo, 13 District Nurses conducted 13 confinements between them, an average of one per nurse per annum. Little or no support has been forthcoming for the Child Welfare clinics which District Nurses have endeavoured to establish and maintain; even where clinics have been arranged at suitable centres, such as mines, the response by mothers has been most disappointing. It is hoped that far greater use will be made of these nurses in future. An average of three European and four African patients per day is scant justification for the expenditure under this head.

(3) *Coloured and Asiatic Hospitals.*

The percentage of the 101 beds available for Coloured and Asiatic patients and occupied during the year was 48 per cent. This compares more than favourably with the figure for Europeans of 72 per cent.; admittedly not all accommodation is suitable but, with the opening in 1953 of a new 60 bedded hospital in Salisbury the position will be reasonably satisfactory except as regards maternity facilities and in some of the smaller centres.

Statistical details are given in Tables D to F of the appendix.

(4) *Mental Disease.*

The patient population continues to rise steadily. In spite of the provision in recent years of modern and up to date wards for Africans there is still undue overcrowding in this section.

During 1952, all 111 European, 13 Coloured and Asiatic and 398 Native patients were admitted, a total of 522. Patients discharged recovered numbered 334, not recovered 22 and 95 died.

The recovery rate calculated on the total number of admissions was 63·86 per cent., European recoveries 72 per cent., Natives 61·4 per cent. and Coloureds 69·2 per cent.

56 Voluntary patients were admitted during the year, 40 being Europeans and 16 Natives. 43 were discharged and 13 remain in hospital.

The staffing situation on the male side has shown some slight improvement but on the female side reliance has still largely to be placed on the services of married nurses acting as temporary staff.

The new laundry has been brought into operation and is now working smoothly.

As an essential feature of the plans for a new European female ward the main drains were relaid and work on this block will commence early in 1953. It will supply a very great need.

The farm supplied over £3,500 worth of produce to the hospital and showed an excess of revenue over expenditure of £739 8s. 7d.

(5) *Native Hospitals.*

The new African Hospitals at Salisbury and Bulawayo are still under construction and it has not yet been possible to open any further patient accommodation. The provision of a new African Hospital at Rusape will be commenced early in 1953. It will contain 108 beds.

Gross overcrowding continues at the majority of African hospitals as the following figures illustrate:—

	1952	1942	1932
Number of beds for which hospitals designed	1,452	930	580
Patients admitted	60,079	27,169	7,680
Average stay of patients in days	11·4	12·7	20·1
Daily average in-patient population	1,890·7	920·97	487·79

The tuberculosis sanatorium in the Chindamora Reserve continues to prove acceptable to the African population. 13 Deaths in 249 patients treated can be regarded as satisfactory.

The African maternity hospitals at Salisbury and Bulawayo handled 2,711 and 3,313 patients respectively during the year.

(6) *Native Clinics.*

3 New clinics were opened at Lundi, Makosa and Ngezi during the year. As a result of the closing of the Shamva European Hospital, the Native Hospital there is now classified as a Native clinic.

The work done at Native Clinics over the past 10 years has increased tremendously as will be seen from the following table:-

	1952	1942
Number of clinics	88	60
Number of beds	3,910	(*a*)
In-patients trested	136,804	35,794
Out-patients treated	375,066	99,740

(*a*) not available

Figures for 1932 are not available but it is estimated that some seven clinics dealt with approximately 5,000 in-patients.

For 1952 the percentage of patients to beds was 133.

A feature of the statistics for the clinics in 1952 is that in spite of an increase in the number of patients treated, there was a 20 per cent. reduction in the number of patient units (i.e. patient-days in hospitals). The actual figures were 2,361,481 units in 1951 and 1,903,761 in 1952. The average duration of stay per patient was reduced from 17·5 days in 1951 to 14·0 days in 1952. This may be ascribed to several factors of which the extended use of Penicillin and other antibiotics in venereal diseases diminishing the need for in-patient treatment is the chief. But credit must also be given to the Government Medical Officers for their promptness in giving efficient treatment in all cases.

(7) *Medical Store.*

The new Medical Store on the Harari Hospital site is now practically complete and will be in use early in 1953. There have been more than the usual number of resignations and transfers of pharmaceutical chemists during the year and this has borne heavily on the professional staff of the Store. The value of sales during the year increased by 37 per cent. and of the total output 87 per cent. was directed to institutions of this department. It is thought that unless adequate capital is provided to permit the Store to maintain a wide variety of stock, individual institutions may be compelled to purchase locally at enhanced prices. The following figures of purchases and sales and the number of issue vouchers involved shows the volume of the service given:—

	1948	1949	1950	1951	1952
Value of Purchases (£)	127,350	174,568	207,425	313,183	348,048
Value of sales (£)	137,350	139,371	176,950	195,306	267,350
Number of issue vouchers . . .	11,418	13,142	13,730	13,333	13,716

(8) *Orthopaedic Centre.*

There has been a further steady increase in the work carried out at this centre.

Many orders were carried out for Northern Rhodesia and Nyasaland patients.

Among items made and fitted were 23 artificial limbs for Europeans, 96 for Africans, 45 spinal supports, 76 calipers, 206 belts and corsets, 32 trusses and 1,470 other appliances and tasks. There are now 3,273 European and 470 African patients on the books.

(9) *Missions.*

	1952	1942	1932
Number of Aided Medical Missions	53	34	(*a*)
Total Admissions	45,861	19,947	(*a*)
Out-patients treated	1,004,030	77,283	(*a*)

(*a*) Not available.

The work carried out by Medical Missions continues to increase, in-patient units from 439,774 in 1951 to 540,805 and out-patient attendances from 773,949 to 1,004,030 whilst the number of beds available has increased from 1,099 to 1,241.

The improved scale of assistance to Missions introduced in 1947 is showing a satisfactory return both in the quantity and quality of the services which are being made increasingly available.

The harmonious relations which have existed throughout the year between staffs of mission hospitals and the Department of Health is an excellent sign that both parties are taking a full share in the common task of providing the Africans with medical services, the present level of which is a matter for great satisfaction.

(10)*Mining and Industrial Medical Services.*

The following figures have been supplied by the medical officers at the Globe and Phoenix Gold Mine, the Riscom Steel Works, the Connemara Mine and the Gaika Mine, all of Que Que.

	Globe and Phoenix	*Riscom*	*Connemara*	*Gaika*
European Employees	103	459	(*a*)	12
African Employees	1,088	1,884	1,117	330
Beds for African patients . . .	79	40	12	18
African admissions	779	1,370	806	(*a*)
European out-patient attendances .	—	4,190	(*a*)	(*a*)
African out-patient attendances . .	5,666	6,984	(*a*)	(*a*)
Occupational accidents	180	4,245	392	(*a*)

(*a*) Not available.

The Medical Officer at Riscom attributes the large number of occupational accidents to the increase in construction work and the influx of new labour, both European and African.

A feature of all four reports is the low incidence of malaria during the year due to residual spraying and the taking of precautions.

In addition to the above, there are also mine hospitals at the Wankie Colliery, the Shabanie Asbestos Mines, the Rezende Gold Mine, Penhalonga, and the African Chrome Mines, Umvukwes. The Shabanie Mine which has hitherto provided facilities for the hospitalization of Europeans other than mine employees has now found it impossible to continue to do so. It will therefore become essential for the Government to provide a European hospital at Shabani.

(11) *African Medical Services Generally.*

The following table gives details of in-patients treated in Government and State-aided institutions, the number of institutions in each category being shown in brackets:—

Type of Hospital	Estimated Beds in 1952	Admissions		
		1952	1942	1932
Native Hospitals (13)	1,452	58,459	21,315	7,924
Mental Hospital (1)	580	398	170	347
Leprosy Hospitals (2)	1,850	331	213	285
Maternity Hospitals (2)	113	5,906	—	—
Tuberculosis Hospital (1)	100	148	—	—
Government Native Clinics (88)	3,910	136,804	35,794	(*a*)
Medical Missions (53)	1,241	45,861	19,947	(*a*)
Local Authority Hospitals (6)	378	8,090	(*a*)	(*a*)
TOTAL (166)	9,624	255,997	77,439	8,556
Rate per 1,000 Africans	4·6	123·6	52·7	7·7

(*a*) Not available.

The admission rate per 1,000 Africans continues to rise, though slowly, whilst the ratio of beds remains almost static at 4·6 per 1,000 or 1 bed per 217 of African population, despite the provision of 325 new beds during the year.

It will be noted from the above that 1 in every 8 of the estimated total African population was admitted to hospital during the year 1952.

(12) *Extracts from District Reports.*

Extracts from reports submitted by Government Medical Officers will illustrate the variety of work and conditions and what is accomplished often under difficult circumstances.

Government Medical Officer, Nyamandhlovu. "The Nyamandhlovu Farmers' Association have continued with their spraying programme in the European area. It appears to have amply justiffed itself. The Native Council is taking responsibility in the Gwaai Reserve."

Senior Government Medical Officer, Umtali. " Malignant malnutrition is the most serious problem in African children in hospital practice. The admission rate is high and the mortality considerable."

"Eighty nine native cases of Pulmonary Tuberculosis were notified in the Umtali Magisterial district during the year and in addition 20 native cases of other forms of tuberculosis."

"Crocodile bites are relatively infrequent in this district. Recently a native woman washing clothes in the Sabi River was attacked by a crocodile. The reptile seized her right forearm. She fought, using her left hand in an effort to push her fingers into the reptile's eyes. It released her right arm and caught the left forearm but eventually she escaped."

Government Medical Officer, Umvukwes. " I attended 49 cases of proved Malaria during 1952 in Europeans and in most cases it was found that preventive treatment had not been adequately carried out."

Government Medical Officer, Umvuma. " It is surprising how well surgical cases do under the somewhat primitive conditions prevailing at the clinic. Much credit must be given to the orderlies for their aseptic technique and preparations of cases, as even minor skin infections are rare and there was no case of deep infection."

Government Medical Officer, Antelope. " It is felt that, although nothing spectacular has been achieved, a solid year's work has been carried out. The increase in the number of women attending for ante-natal examination and other cases coming earlier than heretofore for treatment is gratifying. It is not anticipated that any sudden change of attitude will be noticed but the general education of the local population appears to be progressing slowly in the right direction."

Aided Government Medical Officer, Banket. " There has been a considerable decrease in the number of V.D. admissions, 176 at Banket Clinic for 1952. compared with 226 in 1951. I feel that this is largely due to the fact that curative courses of treatment are now given, whereas previously they were suppressive only."

Government Medical Officer, Belingwe refers to, " The opening of the large new Lundi Clinic, which after a diffident start, has rapidly become popular."

Government Medical Officer, Bindura. " Malaria amongst the Europeans appears to be on the increase again and this is probably due to the fact that the householders have neglected to take all the necessary precautions against mosquito breeding, and many of them are relying on the rapid effect of the new anti-malaria drugs."

Senior Government Medical Officer, Bulawayo. " It was noticed that the mothers were attending the Clinic (Mpilo Maternity Hospital) at a much earlier stage in their pregnancies than in the previous year, thus improving the treatment of such complications as Toxaemia and Syphilis."

Government Medical Officer, Chipinga. " Encounters with wild animals are not uncommon here. In the last month I have had two cases of lacerated leg due to attacks by crocodiles. In one of these the 14 year old boy concerned escaped by biting the crocodile During the dry season last year a herd of elephant pushed over a hut 200 yards from the clinic—fortunately the hut was not occupied."

Government Medical Officer, Filabusi. "Among the African population whooping-cough has been very prevalent throughout the year. No less than nine deaths in the clinic have been due to pneumonia complicating whooping-cough in children under two years of age."

" It has been noted how badly the African, suffering from well established pneumonia, stands being moved."

Senior Government Medical Officer, Gatooma. " Tuberculosis appears to be greatly on the increase in the district and is a very serious problem. The increase has been most marked in cases of tuberculosis of the lungs and a particularly disquieting feature has been the large number of such cases in babies and small children."

" There has been a most disturbing increase in the numbers of cases of vitamin deficiency diseases during the year. Cases of frank Kwashiorkor syndrome have become frequent and a large number have been admitted more or less moribund with gross oedema, sloughing of the superficial layers of the skin and nephritis."

Government Medical Officer, Gwanda. "A survey of the post-mortems performed over the last five years, in patients over ten years, show twelve deaths from carcinoma of the lung, compared with 17 deaths from all other internal malignant growths, i.e. three carcinoma of bladder, four of prostate, three of stomach, three of liver, one of pancreas, one of penis, one glioblastoma and one of multiple secondaries of spindle-cell sarcoma in the lungs."

Government Medical Officer, Hartley. " In the main this year has been a rewarding one, in that the fruit of many years' propagands on the virtues of prophylactic anti-malarial spraying has been seen. In spite of a very wet season at the beginning of the year, the number of cases of malaria was sensibly reduced, and no case of black-water and only two cases of cerebral malaria were seen."

Aided Government Medical Officer, Inyanga. "A change has also been noticed in African patients during the year in that they are much mere willing to complete their treatments and stay as in-patients as long as necessary."

Government Medical Officer, Inyati. "Aerial transport of Government Medical Officers was started here this year. This method of transport is excellent in this area and is a great saving of time and temper although it has the disadvantage that stores and patients cannot be carried."

Government Medical Officer, Mtoko. "An outbreak of rabies appeared amongst dogs in the district and as a result, an inoculation campaign was carried out in April. As despite these measures further cases of rabies appeared, the inoculation campaign was repeated on a more extensive scale later in the year. Several Africans were admitted to the Clinic having been bitten by suspected or proved rabid dogs."

During the year undulant fever made its appearance amongst Europeans of the district, the cases being characterised by a low remittent temperature, muscle and joint pains."

Senior Government Medical Officer, Ndanga. " Compared with reasonable and legimate use (of native ambulances), the number of instances of abuse make one wish, quite frankly, that such a service had never been instituted."

" I believe that in some instances circulars, offering advice on prevention and treatment of malaria, are read and the suggestions adopted, but it is surprising how much ignorance and apathy exists amongst Europeans regarding the elementary facts of malaria, nor will they consider how much trouble and expense could be avoided by simple and inexpensive anti-malarial measures applied to their native labour, which is by no means plentiful and urgently required during the malarial season."

Chapter IV.—PREVENTIVE SERVICES

(1) *Laboratories.*

The reports of the departmental laboratories are reproduced as Appendices L, M, N and O. The investigations conducted at the routine laboratories were as follows:—

	1952	1942	1932
Public Health Laboratory, Salisbury	109,857	45,201	13,305
Hospital Laboratory, Umtali	22,648	—	—
Public Health Laboratory, Bulawayo	100,589	22,696	2,235
Hospital Laboratory, Gwelo	12,953	—	—
Government Analysts' Laboratory	2,256	1,662	381
	248,303	69,559	15,921

(2) *Schools Medical Service.*

A summary of the findings at routine examinations of European, Coloured and Asiatic schools is given in Tables I and J of the Appendix. As it was only possible to examine 656 children in two African schools, Appendix K has been omitted.

The school population continues to rise at a rapid rate as will be seen from the following table:—

	1948	1949	1950	1951	1952
Government Schools	90	92	102	111	125
Enrolment	16,706	18,645	21,708	24,032	26,912
Government-aided Schools	11	13	14	18	20
Enrolment	3,589	4,108	4,323	4,650	4,924

A comparative table of the work carried out by Schools Medical Officers is as follows:—

	1952	1942
European children examined	8,163	3,091
Coloured and Asiatic children examined	1,417	239
African children examined	656	(*a*)
Unsatisfactory nutrition, per cent.—		
European children	20·0	8·6
Coloured and Asiatic children	45·5	28·3
African children	(*b*)	(*a*)
Entrants found unvaccinated—		
European children	281	230
Coloured and Asiatic children	122	31
African children	(*b*)	(*a*)

(*a*) Not available. (*b*) Only two schools inspected.

The Schools Medical Service is being integrated with the Preventive Service with a view to securing greater efficiency and economy.

The rationale of this move is that with a rapidly rising enrolment figure the number of medical inspectors required also rises ,but schools medical work is virtually at a standstill during the school holidays. Therefore by placing schools inspections in the province of the staffs of Regional Medical Officers of Health, these officers are fully employed throughout the year. This regionalization also diminishes the relative amount of mileage to be performed by each medical officer, who also has a wider scope for professional work. During his visits to rural areas he can combine medical inspections of scholars with other aspects of preventive and health promotive work.

(3) *Government Dental Service.*

A new salary scale was established during the year, which is more attractive, and by the end of the year the establishment was up to full strength. During most of the year, however, there were only three to four officers on duty and the Midlands Dental Centre at Gwelo was not manned. The statistics of the work done includes therefore all dental work under two headings only.

(*a*) Schools

	Mashonaland and Manicaland	*Matabeleland and Midlands*
Children examined	8,297	10,158
Children treated	1,651	757
Filling —		
Temporary teeth	897	409
Permanent teeth	2,778	454
Extractions—		
Temporary teeth	1,412	754
Permanent teeth	337	135
Other operations	6	—
Scaling and cleaning	26	9

(*b*) Uniformed Services

	Mashonaland and Manicaland			*Matabeleland and Midlands*		
	(1)	(2)	(3)	(1)	(2)	(3)
Extractions	150	64	3	58	4	7
Fillings	437	226	12	51	13	3
Dentures supplied	40	14	2	8	8	1
Dentures repaired	11	20	3	5	—	1
Other operations	283	191	15	65	12	9

(1) B.S.A. Police. (2) Permanent Staff Corps. (3) Prison Service.

(*c*) Indigent Europeans and Africans.

	Mashonaland and Manicaland	*Matabeleland and Midlands*
Extractions	6,141	1,463
Fillings	67	198
Dentures supplied	85	44
Dentures repaired	26	8
Other operations	59	111

The increase in the work of this service is demonstrated by comparison with work done in former years.

Schools Service—	1952	1942	1932
Children examined	18,455	11,545	1,640
Children treated	2,408	1,404	744
Extractions	2,638	1,969	1,126
Fillings	4,538	1,313	1,123
Other operations	41	21	153
Others—			
Extractions	7,690	3,234	174
Fillings	1,007	64	305
New dentures	202	78	—
Dentures repaired	74	18	—
Other operations	745	146	81
Establishment of dental surgeons	6	3	2

The Government Dental Service also undertakes the urgent dental treatment of troops attending territorial camps and cadets at Inkomo and is also responsible for the treatment of Kenya National Service Men while training in Southern Rhodesia.

(4) *Health of the B.S.A. Police.*

The health of the British South Africa Police has remained satisfactory and the number of days lost from duty low. In the following table, light duty has been counted as half a day's duty lost.

	Europeans	*Africans*
Total strength	986	2,210
Number reporting sick	1,265	1,812
Average days lost per case	8·46	8·16
Cases of venereal disease	—	51
Discharged medically unfit	12	13
Deaths	—	4

Cases of malaria reported were 65 European and 294 African, which compares with 48 European and 378 African in 1951.

Quarters in malarious areas are treated with residual insecticide and members of the Force are advised as to personal anti-malarial measures.

(5) *Military Medical Services.*

During the year 296 members of the Permanent Staff Corps reported sick, as compared with 404 during 1951. Of these, 129 were minor illnesses or injuries needing light duty or excused duty.

The Southern Rhodesia Women's Military and Air Service recorded 90 cases, of which approximately one-third were of a minor nature.

Four camps of Training were held at Inkomo during the year. The following hospital admissions and attendances were recorded:—

	Hospital Admissions	*Attendances at M.I. Room*
First District Camp	51	386
Second District Camp	59	463
Cadet Camp	38	149
Territorial Camp	43	166

The Southern Rhodesia Medical Corps received training at the Barracks Hospital and attended the Annual Territorial Camp.

(6) *Central Government Health Services.*

The policy of decentralization of the Preventive Health Service has been carried a stage further by the appointment of a Regional Medical Officer of Health, Eastern, with a staff consisting of a Medical Officer of Health and three Health Inspectors.

The Schools Medical Service has been integrated with the Preventive Health Service as mentioned in paragraph (2) of this chapter.

Much of the time of the Health Inspectorate is taken up with the inspection of hotels, stores, butcheries and other premises for licensing purposes; this has led to excessive mileage being performed and recommendations have been submitted with a view to effecting a reduction.

The following is a summary of the work done by Government Health Inspectors during 1952:—

Vaccinations	302,588
Diphtheria prophylaxis	4,360
Inspection of licensed hotels	283
Investigations of infectious diseases	614
Routine inspection of premises	10,065
Other duties (including sampling)	4,090
Prosecutions initiated	65
Number of Health Inspectors	21

(7) *Local Government Health Services.*

The health staffs employed by the municipalities during 1952 were as follows:—

	Full-time Medical Officers	*Part-time Medical Officers*	*Health Inspectors*	*Health Visitors*
Salisbury	4	1	11	5
Bulawayo	2	—	11	3
Gatooma	—	1	1	—
Gwelo	—	1	2	—
Que Que	—	1	—	—
Umtali	—	1	1	—

In addition, trained staff is maintained for infectious disease and venereal diseases hospitals by those authorities which have established such facilties and for other general health purposes.

The following table gives figures supplied by five of the municipalities as to their activities during the year:—

Municipal Health Services—Statistics	Salisbury	Bulawayo	Gatooma	Gwelo	Umtali
Estimated European Population	29,000	31,000	1,800	4,890	6,500
Estimated Coloured and Asiatic Population	2,751	2,600	350	374	300
Estimated African Population	79,272	80,000	7,690	14,949	20,000
Admissions—					
European I.D. Hospital	220	328	(*b*)	42	—
Native I.D. Hospital	1,718	811	536	(*b*)	370
Native V.D. Hospital	2,128	1,630	(*b*)	(*b*)	897
Attendances—Native V.D. Clinics	9,896	24,281	(*a*)	57,351	8,208
New Cases of Syphilis in Africans	1,058	1,351	(*a*)	1,031	492
New Cases of Gonorrhoea in Africans	1,345	1,380	(*a*)	549	501
Medical Examination of Africans in Employment	153,173	66,019	23,800	3,520	24,098
Cases Seen at Ante-natal and Child Welfare Clinics (all races)	37,542	16,673	(*b*)	(*b*)	(*b*)
Diphtheria Immunisations	1,241	2,849	—	—	(*a*)
Vaccinations	81,691	69,958	8,817	3,458	3,727
Visits Paid by Health Visitors	10,273	6,713	(*b*)	(*b*)	(*b*)
Inspections by Health Inspectors	45,664	25,745	(*a*)	(*a*)	(*a*)

(*a*) Figures not available. (*b*) No facilities

(8) *Nutrition Council.*

The Council has continued its work under serious difficulties and is much hampered by the lack of a nutritionist. The food technologist appointed during 1951 has, however, carried out much investigatory work on local foods and the introduction of suitable traditional foods from other countries. Various side dishes and relishes used by the African have been collected, examined and analysed, but until a nutritionist is available to make field studies, the effect of these articles on African nutrition cannot be adequately assessed. An interesting observation in the Chindamora Reserve was that a relish consisting almost entirely of rape, a variety of *Brassica*, is specially cultivated. There is a possibility that this dietetic habit aggravates the iodine deficiency and gives rise to endemic goitre in the area.

Investigations of traditional foods in other countries have included " tempe " a fermented soya bean product and the " tortilla " of Mexico, made from wet ground maize.

Tempe is made by a mould fermentation of soya bean in which the proteins are broken down into simpler, more digestible and palatable products of high nutritive value. It is hoped that tempe will be produced commercially in Southern Rhodesia. In the laboratory it costs 1*s.* a pound to produce and commercially should be only a fraction of this. Its nutritive value is higher than beef without bone and its taste is similar. It has the appearance and consistency of cheese and can be eaten raw or in soups and stews. A method of preparation by steeping in brine and then deep-frying in oil is the form it will probably be most acceptable to the African, at least in the early stages of its introduction. It would be difficult in the local climate to produce tempe in the home, but already there are indications that the commercial possibilities of this food preparation are being appreciated.

Tortilla, is the national food of Mexico, a country where maize is, as in Southern Rhodesia, the staple food. The process was already 1,000 years old when maize was first introduced from Central America to Africa, but unfortunately the tortilla process was not introduced at the same time. Whole maize berries are soaked, skinned, mixed with lime, pounded into a paste which is shaped into thin pancakes which are dry-fried on a flat iron over a fire. It is important that tortilla should not be introduced to the African, unaccompanied by a filling or a relish. Tempe, tomato, peppers or onions would probably be an acceptable relish enclosed in a folded tortilla. The cost of manufacture would be much less than what is now spent by the African to buy white bread, sugar, jam and other imported foods which do not provide a blanced diet. In Mexico "masa", the mixed paste for making tortilla, is produced at central mills and is now being mixed with soya bean flour. It is hoped again to encourage commercial interests to undertake the production of the new food and already some large employers of labour are interested.

The advantages of the tortilla process over maize porridge (sadza) are that—

(i) it is more nutritious because of the soaking of the maize berries which mobilises the vitamins and minerals from the pericarp to the endosperm.

(ii) the addition of lime remedies the calcium deficiency in the ordinary African diet and neutralizes the phytic acid present in maize.

(iii) it requires no cooking and is obtained ready for eating. This is a considerable advantage when employees receive cash in lieu of rations and who, not having the time or the facilities, spend their money on bread and imported cooked foods.

The encouragement of an issue of milk at schools during the mid-morning break has been continued. Where the parents cannot pay for the milk and the children are undernourished the milk meal is provided free of charge. The milk supply to African school children in certain localities was discontinued during the year. Africans produce only a negligible quantity of milk and the other communities are scarcely able to meet their own needs and it is hoped, as an experiment, to introduce foods discussed above at African schools.

(9) *Aviation Health.*

A number of travellers continue to arrive in the Colony through yellow fever endemic areas who are not holding valid inoculation certificates. Disembarking passengers are detained for the incubation period in mosquito-proofed quarters. Aviation Health legislation has been revised to give effect to the International Sanitary Regulations and will be introduced in Parliament in 1953. The whole Colony has been declared to be a yellow fever receptive area. At the four yellow fever inoculation centres a total of 3,736 persons were treated in 1952.

Civilian pilots are examined for " B " licences by specially trained and equipped Government Medical Officers at Salisbury and Bulawayo, who examined 169 in 1952.

Chapter V.—ADMINISTRATION AND MISCELLANEOUS.

(1) Staff (Establishment).

1.	*Medical Officers*:	
	At Headquarters.—Secretary for Health, 1; Director of Curative Services, 1; Director of Preventive Services, 1	3
	In Districts.—Medical Superintendents, 7; Government Medical Officers, 52; Aided Government Medical Officers, 9; Regional Medical Officers of Health, 4; Medical Officers of Health, 6	78
	Specialists.—Directors of Laboratories, 2; Pathologist, 1; Superintendents and Assistant Superintendents, Mental and Leprosy Institutions, 5; Radiologists, 4; Ophthalmologist, 1	13
	Junior Resident Medical Officers and Senior House Surgeons	17
		111
2.	*Dental Surgeons*	6
3.	*Analytical Chemists*, 5; Food Technologist, 1	6
4.	*Pharmaceutical Chemists*—	
	At Headquarters	2
	Medical Store	6
	At Hospitals, including Relief Staff (Hospital Secretaries, 19; Dispensers, 5)	24
		32
5.	*Health Inspectors*	23
6.	*Laboratory Professional and Technical Assistants*	25
7.	*Research Laboratory Staff* (Professional Officers, 3; Technical Assistants, 4; Medical Entomologist, 1; Anti-malaria Officers, 8)	16
8.	*Nursing Staff* (Staff Matron, 1; Senior Matrons, 2; Matrons, 27; Sister Tutors, 6; Sisters, 73; Qualified Nurses, General, 282; District Nurses, 19; Student Nurses, 192; Schools Nurses, 2; Male Nurse, Ndanga, 1. Mental Branch: Males—Head Male Attendants and Charge Male Nurses, 6; Qualified Nurses, 22; Females—Senior Matron, 1; Matrons, 2; Sisters, 3; Qualified Nurses, 18)	657
9.	*Orthopaedic Technicians*	2
10.	*Radiographers, including Learners*	23
11.	*Masseuses*	7
12.	*Dietitians*	4
13.	*Occupational Therapists*	2
14.	*Clerical Staff* (Men, 49; Women, 81)	130
15.	*Other European Staff*	75
	Total European Establishment	1,118
	Non-European Staff	2,166

(2) *Nursing Service.*

The staff position shows little, if any improvement. There were 76 recruits to the general nursing staff during the year and there were 75 resignations, only two of which were on retiral from the service on pension. Forty-nine gave marriage as the reason for their resignation. The number of nursing staff on the permanent staff remained at the same figure as 1951 (279), so there is really no improvement towards a better stability in this service. Temporary nursing staff save the situation in many instances, and at the end of 1952 there were 58 in this category. Here too, the turnover has been very high, 49 joining the service and 48 resigning. Of the 15 nurses on the District Nursing Staff, 11 are temporary staff and the same position holds in the female mental nurses ranks, where of a total of 20, 13 are temporary staff nurses.

Three Coloured qualified nurses are now in employment and replace European nurses on establishment. When the new Coloured and Asiatic Hospital is opened in Salisbury and the difficulties of accommodation have been overcome there will be an increasing scope for the employment and the training of Coloured nurses.

Student nurses are aceepted for training at the Salisbury and Bulawayo General Hospitals. Recruits are offering in fairly good numbers and there are waiting lists at both hospitals, but the losses during the training period are heavy. For example, 164 were in training at the end of 1952, 76 joined during the year, 84 resigned. Of the 84 who left the service only 35 had completed their nursing training, 8 left to get married, 19 became disinterested, 3 were unsuitable and 8 were educationally unsuitable. It is interesting ot note that of the 19 girls who resigned because they did not like nursing, 18 left Salisbury Hospital, where there is no Preparatory Training School, and only one from Bulawayo, where such a school has been operating since 1947. A preparatory training school is being established at Salisbury in temporary accommodation in January, 1953.

The comparison of establishments and the actual numbers in employment at the end of the)years 1951 and 1952 give a general picture of the nursing staff situation.

	Establish-ment, 1951–52	Actual Numbers on 31.12.51	Establish ment, 1952–53	Actual Numbers on 31.12.52
General Branch—				
Senior Matrons	2	2	2	2
Matrons	26	26	27	25
Sister Tutors	5	5	6	5
Sisters	67	61	73	65
Qualified Nurses	259	242	282	242
Religious Order Sisters	1	1	1	1
Religious Order Qualified Nurses	6	6	6	6
Coloured Qualified Nurses	—	—	—	3
African Qualified Nurses	18	16	18	21
Mental Branch—				
Senior Matron	1	1	1	1
Matrons	2	2	2	2
Sisters	3	3	3	3
Female Qualified Nurses	18	16	18	14
Male Charge Nurses	6	6	6	6
Male Qualified Nurses	22	19	22	22
Others—				
District Nurses	16	13	19	15
Schools Nurses	2	2	2	2
Male Nurse	1	1	1	1
TOTAL QUALIFIED STAFF	455	422	489	436
Student Nurses	192	172	192	164
TOTAL	647	594	681	600

(3) *Medical Council of Southern Rhodesia.*

A new Medical, Dental and Allied Professions Act was passed by Parliament during 1952 and comes into effect on 1st January, 1953. This new legislation provides for a larger and more representative Council and radically alters the powers of the Council in disciplinary matters.

This new Act introduces a principle which is new to legislation of this sort in the Commonwealth. The Medical Council will now have a Disciplinary Committee which will act as a Court to consider complaints of improper or disgraceful conduct when regard is had to the profession or calling of the registered person. The powers also include the right to inquire whether the extent of the mental or physical disablement of a registered person is such that the continued practising of such person is contrary to public welfare.

The Disciplinary Committee has itself powers, after due enquiry, to do any or all of the following:

(*a*) Order the payment of a penalty not exceeding £50;
(*b*) Order him to pay costs or expenses of the inquiry;
(*c*) Censure him.
(*d*) Caution him and postpone for a period not exceeding three years any further action.

But if the Disciplinary Committee considers his name should be erased from the register, then the Medical Council must apply to the High Court for an order removing the name.

It is considered that this is a very satisfactory safeguard that serious and permanent interference with a registered person's livelihood will be argued in a superior Court of Law.

The numbers on the Registers of the Council at the end of 1952 are as follows, not all necessarily residing and practising in Southern Rhodesia:—

	Additions	*Total*
Medical Practitioners	43	479
Medical Practitioners (temporary registrations)	17	17
Dental Surgeons	13	90
Chemists and Druggists	16	198
Opticians	1	14
Trained Nurses—General	247	1,300
Mental	20	59
Midwives	117	674
Masseurs and Masseuses	3	30
Radiographers	1	7
Medical Laboratory Technicians	2	4
Sanitary (Health) Inspectors	14	74
Meat and Other Foods Inspectors	13	63
Native Nursing Orderlies	48	251
Native Health Demonstrators	8	32

A Medical Council was first established in the Colony if 1927 and since then there have been only two presidents, Dr. Guy Peall, who retired in 1941, and Mr. R. Standish White, C.B.E., a foundation member of the Medical Council, who has been President since 1941 and who retired this year after 25 years' service. The tradition and the high standards set by the Council and its presidents has resulted in the absence of more than very occasional need for disciplinary action by the Council in its management of the medical, dental and allied professions.

(4) *Training.*

(i) *Nursing Training* (*General Training*):

The following are the resulsts of the examinations held by the Medical Council of Southern Rhodesia during the calendar year, 1952:—

	Number of Candidates	*Number passed*	*Number failed*
Preliminary Examinations	51	42	9
Preliminary Examinations (Part I only)	36	29	7
Final Examinations	40	34	6

The examinations were held in April, August and December. Eleven nurses passed the Final Examination with Honours, three of whom were awarded gold medals presented by the local branches of the British Medical Association.

(ii) *Laboratory Technicians.*

In 1949 the Medical Council were empowered to establish a register for medical laboratory technicians and the Public Health Laboratories at Salisbury and Bulawayo were recognised as training schools. The syllabus and standards of training are those set down by the Institute of Medical Laboratory Technology, and it is hoped that the local course of training will eventually be recognised by that Institute.

In examinations in 1952, six candidates presented themselves for the Intermediate Examination and five passed, two presented themselves for the Final Examination, one in Bacteriological Technique, the other in Pathological Technique, and both passed.

(iii) *Native Nursing Orderlies*:

The results of the Lower and Higher Examinations for Native Nursing Orderlies held in June and December are:—

	Number of Candidates	*Number passed*	*Number failed*
Lower Examination	80	44	36
Higher Examination	70	48	22

(iv) *Native Health Demonstrators*:

An examination for Native Health Demonstrators was held in November, 1952. Eight candidates entered and eight passed.

(5) *Military Pensions*:

The following boards on military pensioners were conducted during 1952:—

Southern Rhodesia Pensioners—	
Europeans	198
Coloured	8
Africans	6
New Claims to Pensions—Southern Rhodesia	7
Pensioner for Northern Rhodesia	1
Pensioners for Imperial Government	214
Pensioners for Union of South Africa	84
Pensioners for elsewhere in Empire	4
TOTAL	522

(6) *St. John Ambulance and Red Cross Associations.*

Both these voluntary societies have continued to expand their activities and to provide very much appreciated services both to the Government institutions and services, and to the public.

The St. John Ambulance Association has been very active in training units in First Aid and in Home Nursing, the number of certificates issued in each group showing considerable increases over 1951. Trained members of the Association have continued to give their services at cinemas, public functions and sports fixtures and have rendered very valuable assistance. Members of Nursing detachments have also given considerable assistance in the Hospitals at Bulawayo and Salisbury and in providing nursing staff for the Annual Cadet Camp at Inkomo.

The Association also co-operates in maintaining a Blood Bank for the Blood Transfusion Service in Bulawayo and Salisbury, maintains an African Blood Bank which operates very satisfactorily and successfully, as well as a European Blood Transfusion Service which is likely shortly to be amalgamated with the Red Cross Society's Service into a blood bank. In Umtali an African Blood Transfusion Service has done a great deal of excellent work and has met all demands on it.

The Red Cross Society's activities have similarly expanded in several directions, as a list will show:—

(1) Rehabilitation centres for poliomyelitis cases expanded to a modern and specially designed building.

(2) The Scanlan Farm Clinic for aged natives.

(3) Magazine distribution service to hospitals and outstations.

(4) Hospital car service for patients with genuine transport difficulties.

(5) A " trolley shop " for Salisbury Hospital.

(6) Occupational therapy for long-term patients in hospital.

(7) Training detachments who provide First Aid Posts on numerous occasions as well as maintaining the hospital library service in Salisbury.

(8) A blood transfusion service in Salisbury and co-operating with St. John Ambulance Association in the African Blood Bank.

(9) Co-operation in a Poliomyelitis/Spastic Paraplegia Clinic in Bulawayo.

The thanks of the Government and of the Department of Health are offered to both these Associations for the help so freely given throughout the year.

(7) *Habit-forming Drugs.*

Import certificates numbering 92, and 71 export certificates, were issued by the Department during 1952.

Drugs	*Imports in Grammes*	*Exports in Grammes*
Medicinal Opium	28,246·47	2,010·01
Opium (in tinctures, extracts and other preparations)	25,747·08	5,347·94
Indian Hemp (in the form of galenicals)	Nil	7·77
Morphine Alkaloid	1,407·37	100·88
Diacetyl Morphine (Heroin) Alkaloid	179·45	13·45
Cocaine Alkaloid	1,846·31	55·28
Methyl Morphine (Codeine) Alkaloid)	3,214·78	346·5
Methomorphinan	7·34	Nil
Pethidine	6,411·66	451·8
Amidone	80·64	9·67
Dehydromorphinone	1·00	Nil

The importation of heroin is now prohibited. Inspection of premises were continued and a number of warning and advisory letters sent to chemists and druggists. There is no doubt that a much more satisfactory control of stocks and records of issues of habit-forming drugs is now being maintained in the Colony.

LEPROSY, 1952.

TABLE A.

Institution	Race of Patients	Numbers on Register on 1.1.52	Admissions	Readmitted for Treatment and Returned Absconders	Discharged, Cured or Arrested	Deserted	Died	Number on Register on 31.12.52	Total Treated	Babies Born
Ngomahuru	European	2	1	—	2	—	—	1	3	—
	Coloured	1	—	—	1	—	—	—	1	—
	African	1,000	193	44	280	26	20	914	1,237	17
Mtemwa	African	753	137	75	104	12	13	805	965	32
TOTAL		1,756	331	119	387	38	33	1,720	2,206	49

GOVERNMENT NATIVE CLINICS, 1952.

Government Medical Officer	Clinic	Admissions			In-patients Units			Deaths			Out-patients			Out-patients Treatments			No. of Beds
		V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	
Antelope	Antelope	104	1,526	1,630	1,115	17,805	18,920	—	37	37	450	3,436	3,886	2,323	11,931	14,254	192
	Kezi	56	395	451	778	4,712	5,490	—	6	6	141	1,455	1,596	848	6,313	7,161	48
Banket	Banket	176	1,127	1,303	2,118	8,669	10,787	—	30	30	146	3,000	3,146	662	16,120	16,782	48
	Chinomwe	69	1,015	1,084	628	9,538	10,166	—	15	15	126	3,209	3,335	756	14,863	15,619	15
	Darwendale	48	95	143	1,783	2,836	4,619	—	13	13	115	4,325	4,440	194	15,304	15,498	48
Belingwe	Belingwe	184	1,891	2,075	2,370	28,727	31,097	1	59	60	252	1,361	1,613	1,070	6,071	7,141	48
	Lundi (*a*)	51	403	454	585	3,936	4,521	—	5	5	88	2,286	2,374	283	14,423	14,706	48
	Shabani	—	—	—	—	—	—	—	—	—	1,140	11,314	12,454	6,659	62,574	69,233	—
Bindura	Madziwa	275	1,338	1,613	2,879	10,346	13,225	—	11	11	—	3,979	3,979	—	11,298	11,298	48
	Mt. Darwin	287	1,386	1,673	2,529	10,045	12,574	—	3	3	108	3,501	3,609	198	5,501	5,699	24
	Shamva (*f*)	180	459	639	4,435	6,512	10,947	1	8	9	269	1,390	1,659	560	2,590	3,150	39
Bulawayo	Luveve	4	705	709	34	5,126	5,160	—	2	2	191	9,670	9,861	701	27,445	28,146	30
	Matobo	7	215	222	138	2,280	2,418	1	1	2	43	1,955	1,998	347	9,582	9,929	30
Chipinga	Chipinga	104	1,586	1,690	2,174	24,155	26,329	1	28	29	55	2,536	2,591	362	15,901	16,263	36
	Birchenough	16	927	943	160	11,719	11,879	—	5	5	41	3,160	3,201	150	19,533	19,683	48
	Nyanyadzi	86	1,308	1,394	1,323	15,775	17,098	—	17	17	81	4,792	4,873	457	18,590	19,047	48
Concession	Concession	252	1,342	1,594	3,188	21,537	24,725	—	74	74	80	2,902	2,982	323	10,630	10,953	96
	Rosa	223	1,382	1,605	1,216	13,158	14,374	—	—	—	191	9,820	10,011	1,037	14,101	15,138	48
Enkeldoorn	Buhera	44	470	514	1,269	7,395	8,664	1	7	8	290	3,621	3,911	1,566	16,359	17,925	48
	Sadza (*b*)	32	1,075	1,107	429	8,982	9,411	—	12	12	260	6,767	7,027	736	16,186	16,922	48
	Narira	141	759	900	2,341	9,333	11,674	1	6	7	399	3,139	3,538	1,725	7,863	9,588	48
	Range	263	28	291	7,019	515	7,534	—	1	1	558	2,683	3,241	2,894	9,454	12,348	36
	Ngezi (*g*)	43	1,075	1,118	429	8,982	9,411	—	12	12	260	6,767	7,027	295	16,186	16,481	48
Essexvale	Essexvale	99	889	988	2,303	10,726	13,029	2	20	22	83	2,201	2,284	624	14,517	15,141	60
Filabusi	Filabusi	239	2,257	2,496	4,761	35,859	40,620	2	88	90	10	1,715	1,725	80	6,443	6,523	120
Fort Victoria	Chibi	337	3,005	3,342	4,908	32,644	37,552	—	11	11	—	4,113	4,113	—	8,666	8,666	48
	Matibi	589	4,033	4,622	10,505	38,874	49,379	—	9	9	187	2,503	2,690	1,176	9,622	10,798	30
Gatooma	Gokwe	162	539	701	4,377	18,669	23,046	—	8	8	26	574	600	212	12,486	12,698	48
Gwelo	Gwelo N.V.S.	—	—	—	—	—	—	—	—	—	—	1,690	1,690	—	8,261	8,261	—
Hartley	Hartley	369	2,527	2,896	2,826	20,066	22,892	1	59	60	76	10,529	10,605	187	24,779	24,966	48
	Mondoro	172	1,996	2,168	2,280	14,568	16,848	—	7	7	122	10,771	10,893	322	15,576	15,898	48
Inyanga	Inyanga	119	2,226	2,345	1,907	24,049	25,956	—	12	12	185	4,140	4,325	1,675	22,306	23,981	30
	Tsonzo	112	1,435	1,547	477	12,349	12,826	—	12	12	708	5,468	6,176	2,249	11,737	13,986	24
Inyati	Inyati	80	662	742	2,100	8,975	11,075	—	32	32	36	1,982	2,018	123	6,581	6,704	48
	Dagemella	55	287	342	1,327	3,643	4,970	1	—	1	224	2,198	2,422	1,319	11,562	12,881	20
	Nkai	106	385	491	2,784	3,481	6,265	—	5	5	420	1,040	1,460	2,060	2,943	5,003	20

TABLE B (*cont.*)

GOVERNMENT NATIVE CLINICS, 1952.

Government Medical Officer	Clinic	Admissions			In-patients Units			Deaths			Out-patients			Out-patients Treatments			No. of Beds
		V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	
Karoi	Karoi	109	2,126	2,235	2,151	20,198	22,349	—	48	48	125	4,449	4,574	395	6,554	6,949	48
	Miami	60	556	616	2,244	8,914	11,158	—	8	8	94	3,971	4,065	598	5,652	6,250	20
	Urungwe	38	503	541	90	4,927	5,017	—	14	14	50	3,307	3,357	227	5,551	5,778	48
Makumbi	Makumbi	215	2,667	2,882	3,004	38,467	41,471	2	62	64	1,093	7,520	8,613	6,743	62,530	69,273	60
Marandellas	Marandellas	319	2,510	2,829	12,746	32,099	44,845	1	122	123	168	5,437	5,605	389	14,025	14,414	96
	Shiota	112	717	829	3,908	10,075	13,983	—	15	15	70	5,201	5,271	217	8,242	8,459	48
	Wedza	177	974	1,151	4,027	10,146	14,173	2	26	28	221	5,454	5,675	610	8,731	9,341	48
Melsetter	Melsetter	—	—	—	—	—	—	—	—	—	83	2,961	3,044	566	18,934	19,500	—
	Biri Wiri	79	714	793	1,041	7,831	8,872	1	8	9	237	2,573	2,810	905	7,169	8,074	48
Morgenster	Jena (*c*)	96	959	1,055	1,719	10,304	12,023	2	14	16	342	3,712	4,054	—	22,176	22,176	48
Mrewa	Mrewa	124	1,762	1,886	1,373	11,687	13,060	—	56	56	292	10,747	11,039	588	24,901	25,489	60
Mtoko	Mtoko	231	1,974	2,205	5,390	49,933	55,323	—	54	54	965	6,469	7,434	2,767	13,968	16,735	96
	Makosa (*d*)	150	969	1,119	2,712	13,288	16,000	—	3	3	113	4,439	4,552	291	14,031	14,322	48
	Nayamazuwi	85	1,278	1,363	3,362	19,774	23,136	—	4	4	412	4,821	5,233	1,261	10,111	11,372	36
Ndanga	Ndanga	328	8,107	8,435	4,264	97,539	101,803	1	109	110	—	—	—	—	—	1,261	96
	Bikita	76	4,569	4,645	2,551	78,659	81,210	1	40	41	—	—	—	—	—	4,892	60
	Chichidza	122	4,361	4,483	3,491	69,560	73,051	2	50	52	—	—	—	—	—	5,446	60
	Chiduma	11	446	457	781	25,100	25,881	—	4	4	—	—	—	—	—	437	40
	Chikuku	99	2,790	2,889	2,225	56,897	59,122	3	28	31	—	—	—	—	—	5,711	50
	Chingombe	160	6,141	6,301	5,535	93,816	99,351	1	45	46	—	—	—	—	—	14,697	100
	Chitando	146	3,542	3,688	4,107	66,683	70,790	1	21	22	—	—	—	—	—	7,125	50
	Matsai	62	3,326	3,388	1,953	73,589	75,542	2	33	35	—	—	—	—	—	1,873	40
	Sangwe	16	1,652	1,668	431	63,380	63,811	—	26	26	—	—	—	—	—	1,880	40
	Siyawarewa	92	3,589	3,681	1,756	73,223	74,979	1	24	25	—	—	—	—	—	2,934	50
	Ndanga—Group (10)	1,112	38,523	38,635	27,094	698,446	725,540	12	380	392	—	—	—	—	—	46,256	586
Norton	Norton	198	1,462	1,660	6,054	14,773	20,827	1	52	53	34	5,298	5,332	96	34,136	34,232	36
	Kutama (*e*)	325	879	1,204	196	5,639	5,835	—	21	21	197	22,947	23,144	1,625	35,476	37,101	20
Nyamandhlovu	Nyamandhlovu	120	982	1,102	2,779	14,325	17,104	1	25	26	92	833	925	254	2,778	3,032	48
	Lupani	42	510	552	449	2,887	3,336	—	4	4	127	1,599	1,726	411	4,631	5,042	4
	Sipepa	40	384	424	1,012	6,965	7,977	1	10	11	615	3,909	4,524	2,048	10,566	12,614	48
	Tjolotjo	89	780	869	1,312	6,599	7,911	—	11	11	409	3,746	4,155	1,214	16,245	17,559	36
Plumtree	Plumtree	219	1,383	1,602	1,579	14,033	15,612	2	29	31	401	4,073	4,474	1,671	10,410	12,081	48

TABLE B (*cont.*)

GOVERNMENT NATIVE CLINICS, 1952.

Government Medical Officer	Clinic	Admissions			In-patients Units			Deaths			Out-patients			Out-patients Treatments			No. of Beds
		V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	
Plumtree	Lady Mary Baring	35	179	214	446	2,252	2,698	1	8	9	181	1,638	1,819	1,098	13,811	14,909	10
	Mphoengs	125	615	740	1,067	6,042	7,109	—	2	2	285	2,426	2,711	649	6,587	7,236	30
	Stanley	28	277	305	139	3,891	4,030	1	13	14	90	1,447	1,537	321	7,236	7,557	6
Que Que	Loretto	228	2,746	2,974	3,674	29,067	32,741	1	21	22	1,088	19,350	20,438	2,342	21,002	23,344	48
Rusape	Chiduku	17	338	355	472	6,328	6,800	1	9	10	131	1,678	1,809	746	15,363	16,109	15
	Makoni	66	1,719	1,785	952	15,085	16,037	—	6	6	240	6,749	6,989	2,004	79,108	81,112	48
	Nedwedzo	63	1,338	1,401	1,160	14,035	15,195	—	6	6	34	6,182	6,216	244	14,129	14,373	48
Salisbury	Highfield	—	1,457	1,457	—	14,130	14,130	—	2	2	334	11,626	11,960	2,699	37,903	40,602	32
Selukwe	Selukwe	—	1,201	1,201	—	11,924	11,924	—	33	33	—	5,111	5,111	—	11,791	11,791	24
	Dzwamabande	263	2,009	2,272	2,307	5,211	7,518	1	17	18	120	4,735	4,855	430	8,091	8,521	48
	Sebanga	178	—	178	2,996	—	2,996	—	—	—	44	—	44	328	—	328	48
	Mabedzenge	—	—	—	—	—	—	—	—	—	—	5,013	5,013	—	6,634	6,634	—
Umtali	Maranke	31	417	448	424	5,813	6,237	—	10	10	147	1,931	2,078	1,560	5,948	7,508	48
	Odzi	177	820	997	3,836	12,346	16,182	—	6	6	94	2,588	2,682	441	14,444	14,885	48
Umvukwes	Arrowan	70	834	904	485	9,641	10,126	—	23	23	72	1,676	1,748	229	7,884	8,113	24
	Sipolilo	26	853	879	328	10,231	10,559	—	14	14	8	3,355	3,363	34	17,330	17,364	30
Umvuma	Umvuma	222	2,145	2,367	5,206	28,506	33,712	1	47	48	115	4,507	4,622	591	12,044	12,635	48
	Chilimanzi	117	1,694	1,811	2,671	20,226	22,897	—	12	12	42	3,032	3,074	274	18,197	18,471	48
	Chinyika	45	1,461	1,506	1,345	16,223	17,568	—	9	9	4	8,173	8,177	45	21,877	21,922	15
	Gutu	98	1,899	1,997	3,665	28,779	32,444	3	18	21	22	4,582	4,604	660	24,172	24,832	48
Victoria Falls	Victoria Falls	—	—	—	—	—	—	—	—	—	—	960	960	—	13,164	13,164	—
Wankie	Lukosi	228	401	629	3,482	8,343	11,825	—	14	14	19	2,278	2,297	184	12,483	12,667	48
TOTAL	(88)	11,041	125,763	136,804	198,392	1,705,369	1,903,761	46	1,851	1,897	16,571	358,495	375,066	71,928	1,210,412	1,328,596	3,910

(*a*) Opened on 7th July, 1952.
(*b*) Previously named Kwenda.
(*c*) Supervised by a missionary doctor.
(*d*) Opened on 6th February, 1952.
(*e*) Previously supervised by G.M.O., Hartley
(*f*) Previously Shamva Hospital; became a Clinic on 1st September, 1952.
(*g*) Opened on 2nd May, 1952.

TABLE C.

CLASSIFICATION OF EUROPEAN DEATHS, 1952.

Deaths Classified according to the International Statistical Classification of Diseases, Injuries and Causes of Death; Sixth Decennial Revision; Intermediate List.

International List No.	*Cause of Death*	*Number of Deaths*		
		Male	*Female*	*Total*
A. 1	Tuberculosis of respiratory system	5	1	6
A. 2	Tuberculosis of meninges and central nervous system	1	—	1
A. 5	Tuberculosis, all other forms	—	1	1
A. 10	All other syphilis	1	—	1
A. 15	Brucellosis (undulant fever)	1	—	1
A. 16	Dysentery, all forms	1	—	1
A. 21	Diptheria	6	2	8
A. 23	Meningococcal infections	2	2	4
A. 26	Tetanus	2	—	2
A. 28	Acute poliomyelitis	5	3	8
A. 37	Malaria	10	4	14
A. 40	Filariasis	1	—	1
A. 44	Malignant neoplasm of buccal cavity and pharynx	5	—	5
A. 45	Malignant neoplasm of oesophagus	1	—	1
A. 46	Malignant neoplasm of stomach	9	8	17
A. 47	Malignant neoplasm of intestine except rectum	14	5	19
A. 48	Malignant neoplasm of rectum	4	2	6
A. 49	Malignant neoplasm of larynx	1	—	1
A. 50	Malignant neoplasm of trachea, and of bronchus and lung not specified as secondary	12	2	14
A. 51	Malignant neoplasm of breast	—	14	14
A. 52	Malignant neoplasm of cervix uteri	—	2	2
A. 53	Malignant neoplasm of other and unspecified parts of uterus	—	5	5
A. 54	Malignant neoplasm of prostate	8	—	8
A. 55	Malignant neoplasm of skin	—	1	1
A. 57	Malignant neoplasm of all other and unspecified sites	16	17	33
A. 58	Leukaemia and aleykaemia	5	3	8
A. 59	Lymphosarcoma and other neoplasms of Lymphatic and haematopoietic system	5	2	7
A. 60	Benign neoplasms and neoplasms of unspecified nature	1	2	3
A. 63	Diabetes mellitus	2	4	6
A. 65	Anaemias	—	3	3
A. 66	Allergic disorders; all other endocrine, metabolic and blood diseases	10	4	14
A. 67	Psychoses	1	—	1
A. 68	Psychoneurosis and disorders of personality	—	1	1
A. 70	Vascular lesions affecting central nervous system	37	51	88
A. 71	Nonmeningococcal meningitis	2	1	3
A. 73	Epilepsy	1	1	2
A. 78	All other diseases of nervous system and sense organs	6	5	11
A. 79	Rheumatic fever	5	3	8
A. 80	Chronic rheumatic heart disease	6	11	17
A. 81	Arteriosclerosis and degenerative heart disease	95	44	139
A. 82	Other diseases of heart	9	6	15
A. 83	Hypertension with heart disease	16	15	31
A. 84	Hypertension without mention of heart	6	11	17
A. 85	Diseases of arteries	6	4	10
A. 86	Other diseases of circulatory system	3	1	4
A. 88	Influenza	1	1	2
A. 89	Lobar pneumonia	10	—	10
A. 90	Bronchopneumonia	8	9	17
A. 91	Primary, atypical, other and unspecified pneumonia	14	—	14
A. 93	Bronchitis, chronic and unqualified	2	3	5
A. 94	Hypertrophy of tonsils and adenoids	—	1	1
A. 97	All other respiratory diseases	11	1	12
A. 99	Ulcer of stomach	2	—	2
A. 100	Ulcer of duodenum	1	—	1
A. 101	Gastritis and duodenitis	—	1	1
A. 102	Appendicitis	2	1	3
A. 103	Intestinal obstruction and hernia	3	1	4
A. 104	Gastro-enteritis and colitis, except diarrhoea of the newborn	4	5	9
A. 105	Cirrhosis of liver	7	2	9
A. 106	Cholelithiasis and cholecystitis	2	2	4
A. 107	Other diseases of digestive system	2	4	6
A. 109	Chronic, other and unspecified nephritis	8	5	13

International List No.	*Cause of Death*	*Number of Deaths* Male	Female	Total
A. 110	Infections of Kidney	—	2	2
A. 111	Calculi of urinary system	1	—	1
A. 112	Hyperplasia of prostate	5	—	5
A. 114	Other diseases of genito-urinary system	1	1	2
A. 116	Toxaemias of pregnancy and the puerperium	—	1	1
A. 117	Haemorrhage of pregnancy and childbirth	—	1	1
A. 119	Abortion with sepsis	—	1	1
A. 120	Other complications of pregnancy, childbirth and the puerperium	—	1	1
A. 122	Arthritis and spondylitis	—	1	1
A. 126	All other diseases of skin and muskuloskeletal system	1	1	2
A. 128	Congenital malformations of circulatory system	5	3	8
A. 129	All other Congenital malformations	1	—	1
A. 130	Birth injuries	3	1	4
A. 131	Postnatal asphyxia and atelectasis	8	6	14
A. 132	Infections of newborn	2	1	3
A. 133	Haemolytic disease of newborn	1	3	4
A. 134	All other defined diseases of early infancy	1	4	5
A. 135	Ill defined diseases perculiar to early infancy and immaturity unqualified	19	14	33
A. 136	Senility without mention of pychosis	5	6	11
A. 137	Ill defined and unknown causes of morbidity and mortality	10	5	15
A.E. 138	Motor vehicle accidents	15	5	20
A.E. 139	Other transport accidents	13	—	13
A.E. 140	Accidental poisoning	1	1	2
A.E. 141	Accidental falls	8	1	9
A.E. 144	Accident caused by hot substance, corrosive liquid, steam and radiation	2	—	2
A.E. 145	Accident caused by firearm	6	—	6
A.E. 146	Accidental drowning and submersion	4	—	4
A.E. 147	All other accidental causes	19	9	28
A.E. 148	Suicide and self inflicted injury	26	2	28
A.E. 149	Homicide and injury purposely inflicted by other persons (not in war)	1	1	2
		556	348	904

TABLE D.

ADMISSIONS TO GOVERNMENT HOSPITALS AND OUT-PATIENT ATTENDANCES, 1952.

Hospital	Admissions				Deaths				Out-patient Attendances			
	European	Coloured and Asiatic	African	Total	European	Coloured and Asiatic	African	Total	European	Coloured and Asiatic	African	Total
General:												
Salisbury	4,487	397	13,189	18,073	130	15	740	885	29,665	1,608	154,468	185,741
Bulawayo	6,116	655	9,394	16,165	144	16	588	748	14,813	1,380	173,199	189,392
Bindura	239	—	1,221	1,460	4	—	73	77	588	—	7,444	8,032
Chipinga	212	—	—	212	1	—	—	1	1,434	—	—	1,434
Enkeldoorn	244	—	1,688	1,932	11	—	54	65	275	—	2,030	2,305
Fort Victoria	449	13	2,833	3,295	9	1	108	118	1,525	172	13,867	15,564
Gatooma	955	106	7,402	8,463	14	3	296	313	370	61	27,041	27,472
Gwanda	245	41	3,820	4,106	1	1	83	85	261	31	6,258	6,550
Gwelo	1,625	116	4,199	5,940	32	5	218	255	1,443	141	24,919	26,503
Marandellas	212	—	—	212	9	—	—	9	1,067	—	—	1,067
Que Que	712	51	2,304	3,067	10	2	153	165	407	—	5,210	5,617
Rusape	313	10	3,467	3,790	7	—	91	98	1,401	70	27,322	28,793
Selukwe	211	—	—	211	1	—	—	1	113	—	—	113
Shamva (*a*)	3	—	1,601	1,604	—	—	46	46	18	—	3,507	3,525
Sinoia	356	—	2,853	3,209	6	—	119	125	258	—	15,176	15,434
Umtali	1,553	161	4,488	6,202	27	4	196	227	700	348	24,173	25,221
TOTAL (16)	17,932	1,550	58,459	77,941	406	47	2,765	3,218	54,338	3,811	484,614	542,763
Special Hospitals:												
Ingutsheni	111	13	398	522	11	2	82	95	—	—	—	—
Nervous Disorders	193	—	—	193	1	—	—	1	247	—	—	247
Martin T.B. Sanatorium	—	—	148	148	—	—	13	13	—	—	19	19
Harari Maternity	—	—	2,633	2,633	—	—	20	20	—	—	4,499	4,499
Mpilo Maternity	—	—	3,273	3,273	—	—	7	7	—	—	11,913	11,913
TOTAL (5)	304	13	6,452	6,769	12	2	122	136	247	—	16,431	16,678
GRAND TOTAL	18,236	1,563	64,911	84,710	418	49	2,887	3,354	54,585	3,811	501,045	559,441

(*a*) Closed on 31st August, 1952.

STAFFING, BEDS, AND PATIENTS OF GOVERNMENT HOSPITALS, 1952.

Hospital	Nursing Staff			Number of Beds			Number of In-patients (*a*)				In-patients Daily Average			Number of In-patient Units Maintained				Average Stay in Hospital in Days		
	European	Coloured and Asiatic	African	European	Coloured and Asiatic	African	European	Coloured and Asiatic	African	Total	European	Coloured and Asiatic	African	European	Coloured and Asiatic	African	Total	European	Coloured and Asiatic	African
General[																				
Salisbury	114	5	91	150	22	284	4,601	409	13,559	18,569	133·7	13·4	411·1	48,936	4,921	150,445	204,302	10·6	12·0	11·1
Bulawayo	114	9	98	244	30	337	6,278	671	9,694	16,643	201·1	21·0	347·8	73,587	7,659	127,306	208,552	11·7	11·4	13·1
Bindura	6	—	7	10	—	30	240	—	1,245	1,485	4·9	—	33·6	1,779	—	12,303	14,082	7·4	—	9·9
Chipinga	5	—	—	14	—	—	215	—	—	215	2·8	—	—	1,019	—	—	1,019	4·7	—	—
Enkeldoorn	6	—	14	14	—	38	247	—	1,746	1,993	4·7	—	56·3	1,733	—	20,626	22,359	7·0	—	11·8
Fort Victoria	8	—	12	24	1	34	456	13	2,895	3,364	7·5	0·1	71·8	2,764	39	26,286	29,089	6·1	3·0	9·1
Gatooma	20	3	46	44	12	240	968	111	7,635	8,714	17·5	3·6	247·5	6,402	1,335	90,571	98,308	6·6	12·0	11·9
Gwanda	6	—	20	6	—	74	247	41	3,917	4,205	3·6	0·7	113·5	1,310	256	41,562	43,128	5·3	6·2	10·6
Gwelo	23	11	24	56	14	72	1,649	118	4,278	6,045	42·3	3·4	120·8	15,488	1,246	44,227	60,961	9·4	10·5	10·3
Marandellas	5	—	—	10	—	—	216	—	—	216	5·5	—	—	2,110	—	—	2,110	9·8	—	—
Que Que	16	—	21	25	10	92	719	51	2,386	3,156	18·6	1·2	99·1	6,818	438	36,281	43,537	9·5	8·6	15·2
Rusape	6	—	7	15	4	45	317	10	3,532	3,859	5·1	0·1	78·7	1,881	40	28,812	30,733	5·9	4·0	8·1
Selukwe	5	—	—	12	—	—	217	—	—	217	5·0	—	—	1,843	—	—	1,843	8·5	—	—
Shamva (*b*)	2	—	12	6	—	39	3	—	1,693	1,696	—	—	69·4	9	—	17,764	17,773	3·0	—	10·5
Sinoia	11	—	8	13	—	87	359	—	2,908	3,267	6·8	—	106·2	2,483	—	38,873	41,356	6·9	—	13·3
Umtali	20	4	14	45	8	80	1,589	166	4,591	6,346	33·1	5·2	134·9	12,278	1,902	49,381	63,561	7·7	11·4	10·7
TOTAL	367	32	374	688	101	1,452	18,321	1,590	60,079	79,990	492·2	48·7	1,890·7	180,440	17,836	684,437	882,713	9·8	11·2	11·4
Special:																				
Ingutsheni	47	—	81	136	—	580	305	39	1,229	1,573	163·3	24·2	819·4	59,773	8,858	299,912	368,543	196·0	227·1	244·0
Nervous Disorders	6	—	—	23	—	—	206	—	—	206	13·3	—	—	4,867	—	—	4,867	23·6	—	—
Martin Sanatorium	4	—	17	—	—	100	—	—	249	249	—	—	100·8	—	—	36,899	36,899	—	—	148·1
Harari Maternity	3	—	31	—	—	56	—	—	2,711	2,711	—	—	48·8	—	—	17,859	17,859	—	—	6·5
Mpilo Maternity	3	—	27	—	—	65	—	—	3,313	3,313	—	—	49·1	—	—	17,988	17,988	—	—	5·4
TOTAL	63	—	156	159	—	801	511	39	7,502	8,052	176·6	24·2	1,018·1	64,640	8,858	372,658	446,156	126·7	227·1	49·6
GRAND TOTAL	430	32	530	847	101	2,253	18,832	1,629	67,581	88,042	668·8	72·9	2,908·8	245,080	26,694	1,057,095	1,328,869	13·0	16·4	15·6

(*a*) Includes patients in hospital on 1st January, 1952.

(*b*) Shamva closed down as a hospital on 31st August, 1952. The Native Hospital now has the status of a clinic.

TABLE F.

ADMISSIONS TO GOVERNMENT GENERAL HOSPITALS, 1952, OF CASES OF CERTAIN SPECIFIED DISEASES.

Hospital	MALARIA						BLACKWATER FEVER						DYSENTERY						PNEUMONIA						TYPHOID FEVER					
	European		Coloured and Asiatic		African		European		Coloured and Asiatic		African		European		Coloured and Asiatic		African		European		Coloured and Asiatic		African		European		Coloured and Asiatic		African	
	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths	Cases	Deaths
Salisbury	104	3	8	—	188	8	1	—	—	—	—	—	10	—	3	—	80	7	126	4	17	—	1,167	141	11	—	3	—	35	9
Bulawayo	74	1	29	—	351	8	—	—	—	—	—	—	44	—	7	—	204	2	183	9	75	1	843	124	1	—	—	—	39	3
Bindura	59	—	—	—	239	7	—	—	—	—	—	—	—	—	—	—	—	—	5	—	—	—	91	19	—	—	—	—	—	—
Chipinga	48	—	—	—	—	—	—	—	—	—	—	—	5	—	—	—	—	—	4	—	—	—	—	—	1	—	—	—	—	—
Enkeldoorn	22	—	—	—	137	—	—	—	—	—	—	—	7	—	—	—	13	4	9	—	—	—	61	6	2	—	—	—	3	—
Fort Victoria	62	—	2	—	231	3	—	—	—	—	—	—	8	—	—	—	14	—	14	1	—	—	67	3	2	—	—	—	3	—
Gatooma	150	2	19	1	728	28	—	—	—	—	—	—	12	1	—	—	160	10	37	2	4	1	380	32	22	—	—	—	19	7
Gwanda	21	—	—	—	124	2	—	—	—	—	—	—	9	—	—	—	19	2	13	—	1	1	71	15	—	—	—	—	6	1
Gwelo	40	—	8	—	226	1	—	—	—	—	—	—	103	—	1	—	74	2	65	1	3	—	153	31	4	—	—	—	7	2
Marandellas	22	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	4	—	—	—	—	—	1	—	—	—	—	—
Que Que	42	2	—	—	200	14	—	—	—	—	—	—	—	—	—	—	—	—	25	1	—	—	36	14	—	—	—	—	1	1
Rusape	39	—	—	—	283	11	—	—	—	—	—	—	9	—	—	—	36	—	3	—	—	—	73	6	1	—	—	—	7	2
Selukwe	7	—	—	—	—	—	—	—	—	—	—	—	1	—	—	—	—	—	19	—	—	—	—	—	—	—	—	—	—	—
Shamva	1	—	—	—	155	2	—	—	—	—	—	—	—	—	—	—	15	1	—	—	—	—	78	3	—	—	—	—	1	—
Sinoia	48	—	—	—	221	4	—	—	—	—	—	—	2	—	—	—	4	—	7	—	—	—	93	12	—	—	—	—	12	3
Umtali	175	1	14	—	572	13	1	—	—	—	—	—	4	—	—	—	26	6	32	6	1	—	237	17	4	—	—	—	15	3
TOTAL	914	9	80	1	3,655	101	2	—	—	—	—	—	215	1	11	—	645	34	546	24	101	3	3,350	423	49	—	3	—	148	31

MEDICAL MISSIONS, 1952.

Missions Grouped by Denominations	Admissions			In-patient Units			Deaths			Out-patients			Out-patients Attendances			Staff (Resident)			Beds	
	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	Medical	Nursing	Auxiliary	Authorized for Grants	Total
American Board:																				
Chikore	6	614	620	42	4,603	4,645	—	5	5	35	5,000	5,035	202	3,796	3,998	—	1	2	16	20
Mt. Selinda	76	1,412	1,488	579	17,060	17,639	2	40	42	166	2,218	2,384	1,212	5,619	6,831	2	3	3	50	50
Anglican:																				
Daramombe	—	501	501	—	2,073	2,073	—	—	—	—	2,570	2,570	—	6,804	6,804	—	1	—	—	7
St. Augustine's	—	—	—	—	—	—	—	—	—	32	6,168	6,200	400	8,049	8,449	—	1	1	—	—
St. David's, Bonda	513	2,612	3,125	5,425	30,357	35,782	—	23	23	304	3,288	3,592	5,611	11,816	17,427	1	6	1	80	150
St. Faith's	—	58	58	—	355	355	—	—	—	136	6,524	6,660	1,040	8,064	9,104	—	1	1	2	11
St. Patrick's	—	—	—	—	—	—	—	—	—	249	2,077	2,326	1,223	4,244	5,467	—	1	—	—	—
Brethren in Christ:																				
Matopo	2	37	39	10	284	294	—	—	—	3	798	801	30	2,992	3,022	—	1	—	—	9
Mtshabezi	157	787	944	827	11,778	12,605	—	14	14	62	2,342	2,404	149	6,638	6,787	1	1	4	32	32
Church of Christ:																				
Nhowe	58	469	527	404	2,240	2,644	—	8	8	98	2,584	2,682	555	7,287	7,842	1	—	1	8	18
Dutch Reformed Church:																				
Gutu	—	1,221	1,221	—	10,365	10,365	—	53	53	656	8,393	9,049	4,295	52,272	56,567	1	1	4	18	18
Morgenster	—	1,951	1,951	—	20,472	20,472	—	61	61	1,016	7,510	8,526	—	60,585	60,585	3	2	7	62	70
Elim Missions:																				
Elim, Inyanga	62	1,361	1,423	94	4,256	4,350	1	2	3	89	4,069	4,158	444	13,035	13,479	1	1	—	—	4
Evangeclical Alliance:																				
Mavuradontha	—	73	73	—	815	815	—	2	2	—	2,652	2,652	—	6,789	6,789	—	1	—	—	—
Rukomitchi	—	—	—	—	—	—	—	—	—	—	1,163	1,163	—	1,272	1,272	—	1	—	—	—
Free Methodist Church of North America:																				
Chikombedzi	—	115	115	—	1,460	1,460	—	4	4	51	6,349	6,400	746	41,404	42,150	1	2	—	3	12
Lundi	—	—	—	—	—	—	—	—	—	31	5,298	5,329	147	16,485	16,632	—	—	—	—	1
Free Presbyterian Church of Scotland:																				
Zenka	—	—	—	—	—	—	—	—	—	35	6,397	6,432	399	7,851	8,250	—	1	—	—	—
London Missionary Society:																				
Dombodema	—	76	76	—	478	478	1	2	3	88	3,879	3,967	355	5,471	5,826	—	2	—	2	7
Methodist Episcopal:																				
Mutambara	216	704	920	2,088	7,013	9,101	4	8	12	1,275	2,036	3,311	10,140	13,308	23,448	—	2	3	27	34
Nyaderi	264	2,857	3,121	2,012	21,956	23,968	—	51	51	—	897	897	—	6,336	6,336	1	3	4	56	58
Old Umtali	15	918	933	218	8,809	9,027	—	7	7	54	1,472	1,526	627	12,081	12,708	—	2	3	24	27

MEDICAL MISSIONS, 1952.

Missions Grouped by Denominations	Admissions			In-patient Units			Deaths			Out-patients			Out-patient Attendances			Staff (Resident)			Beds	
	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	V.D.	Other	Total	Medical	Nursing	Auxiliary	Authorized for Grants	Total
Roman Catholic:																				
All Souls', Mtoko	15	466	481	240	6,352	6,592	—	5	5	80	4,655	4,735	328	5,843	6,171	—	1	—	16	16
Chishiwasha	—	160	160	—	1,204	1,204	—	3	3	55	5,688	5,743	543	10,579	11,122	—	1	1	5	5
Driefontein	51	681	732	367	4,377	4,744	1	7	8	635	4,846	5,481	3,008	8,769	11,777	—	1	—	3	8
Empandeni	—	394	394	—	3,021	3,021	—	1	1	361	4,260	4,621	2,223	47,479	49,702	—	1	1	12	26
Fatima	285	625	910	3,990	9,129	13,119	—	9	9	243	6,950	7,193	1,412	10.150	11,562	1	2	—	35	80
Gokomere	43	600	643	817	9,500	10,317	—	5	5	136	10,455	10,591	538	44,365	44,903	—	1	—	19	19
Holy Cross	138	577	715	1,540	7,216	8,756	2	14	16	1,734	2,813	4,547	13,225	14,051	27,276	—	1	—	6	6
Monte Cassino	—	178	178	—	1,359	1,359	—	1	1	—	845	845	—	19,615	19,615	—	2	—	—	10
Mount Melleray	60	1,365	1,425	480	7,766	8,246	2	19	21	103	1,743	1,846	724	2,965	3,689	1	1	—	—	6
Mukaro	74	810	884	1,085	10,872	11,957	—	5	5	828	10,496	11,324	8,804	45,984	54,788	—	1	—	—	3
Silveira	328	1,384	1,712	1,755	14,657	16,412	—	26	26	297	10,389	10,686	1,370	29,027	30,397	1	3	11	24	24
St. Anthony's, Zaka	—	—	—	—	—	—	—	—	—	223	24,401	24,624	1,784	25,860	27,644	—	1	—	—	—
St. Barbara's	70	775	845	518	8,590	9,108	3	2	5	197	14,374	14,571	1,586	34,806	36,392	—	2	1	24	25
St. Joseph's, Gwelo	94	476	570	796	4,759	5,555	5	17	22	793	10,954	11,747	7,130	31,160	38,290	—	1	—	6	6
St. Joseph's, Semokwe	21	440	461	177	4,353	4,530	6	12	18	657	2,627	3,284	2,507	11,776	14,283	—	1	—	15	15
St. Luke's, Bubi	91	547	638	1,086	5,438	6,524	1	15	16	212	3,858	4,070	590	6,411	7,001	1	1	1	6	32
St. Michael's, Mondoro	142	899	1,041	604	6,593	7,197	—	9	9	446	10,757	11,203	2,320	81,969	84,289	—	1	—	6	20
St. Paul's, Musami	68	1,794	1,862	2,040	9,245	11,285	5	16	21	325	5,194	5,519	2,600	20,065	22,665	—	1	—	25	25
Triashill	89	989	1,078	1,018	11,656	12,674	1	11	12	310	5,664	5,974	2,086	12,148	14,234	—	1	1	24	24
Salvation Army:																				
Howard Institute	19	567	586	62	6,729	6,791	—	8	8	10	2,147	2,157	46	14,237	14,283	—	1	1	15	20
Mbebeswana	82	240	322	266	827	1,093	—	—	—	314	1,501	1,815	1,754	3,162	4,916	—	—	2	6	6
Tshelanyemba	192	636	828	1,544	4,334	5,878	1	10	11	1,222	1,726	2,948	5,676	5,845	11,521	—	1	2	8	8
Seventh Day Adventist:																				
Lower Gwelo	22	704	726	84	2,168	2,252	—	4	4	1,007	4,708	5,715	4,028	10,675	14,703	—	1	1	16	16
Solusi	207	278	485	851	1,263	2,114	1	3	4	1,010	3,747	4,757	5,114	16,017	21,131	—	1	1	5	6
South African General Mission:																				
Rusitu	49	376	425	659	3,809	4,468	2	5	7	94	3,413	3,507	549	6,704	7,253	—	1	—	8	8
Swedish Mission:																				
Manana	1,179	391	1,570	28,892	9,537	38,429	—	7	7	758	144	902	12,416	3,486	15,902	—	1	2	25	25
Masase	992	937	1,929	23,428	18,095	41,523	—	18	18	575	548	1,123	9,993	5,272	15,265	—	1	4	50	50
Mnene	3,034	1,915	4,949	53,676	48,830	102,506	3	67	70	134	935	1,069	2,442	8,678	11,120	1	4	6	175	185
Musume	650	752	1,402	16,080	13,017	29,097	—	9	9	582	724	1,306	8,059	6,992	15,051	—	1	2	—	19
Wesleyan Methodist:																				
Epworth	—	—	—	—	—	—	—	—	—	—	1,204	1,204	—	15,040	15,040	—	—	—	—	—
Waddilove	—	775	775	—	7,981	7,981	—	11	11	—	8,189	8,189	—	12,272	12,272	—	1	—	20	20
TOTAL (53)	9,364	36,497	45,861	153,754	387,051	540,805	41	599	640	17,721	253,639	271,360	130,430	873,600	1,004,030	16	71	72	934	1,241

TABLE H.

MATERNITY HOMES, 1952.

Name	Town	Patients remaining 1.1.52	Admitted	Patients remaining 31.12.52	Died	Confinements	Births		Deaths of Infants	Operations		Beds
							Live	Still		Major	Minor	
Lady Chancellor	Salisbury	30	1,397	32	1	1,305	1,307	20	20	62	529	45
Lady Rodwell	Bulawayo	23	1,156	28	—	1,006	1,007	12	12	38	328	38
Lady Kennedy	Umtali	9	322	5	—	300	296	6	1	16	42	10
Appelby	Bindura	1	51	—	—	50	49	1	1	2	14	3
Birchenough	Gwelo	3	318	7	—	257	248	9	5	—	6	9
Donaldson	Selukwe	1	26	—	—	26	26	—	—	—	—	5
Enkeldoorn	Enkeldoorn	1	32	2	—	31	31	—	—	—	—	2
Fort Victoria	Fort Victoria	—	91	1	—	80	80	2	—	—	—	9
Que Que	Que Que	4	128	1	1	117	114	4	3	1	—	6
Rusape	Rusape	1	55	—	1	55	53	2	1	8	1	2
Sinoia	Sinoia	—	69	2	—	64	66	—	—	—	—	2
Total Government operated Homes (11)		73	3,645	78	3	3,291	3,277	56	43	127	920	131
White Hollow	Bulawayo	—	112	4	—	107	109	—	—	—	—	8
Clarison	Bulawayo	5	110	7	—	107	107	—	1	—	—	10
Queen Mary	Gatooma	2	160	3	—	149	146	1	2	—	32	11
Greenwood Park	Salisbury	5	273	3	1	276	276	2	1	20	—	14
Total Privately operated Homes (4)		12	655	17	1	639	638	3	4	20	32	43
GRAND TOTAL		85	4,300	95	4	3,930	3,915	59	47	147	952	174

TABLE I.

EUROPEAN SCHOOLS: FINDINGS OF MEDICAL INSPECTION, 1952.

Routine Medical Examinations Children Born			Group 0, 1946	Group 1, 1945/1944	Group 2, 1943/1942	Group 3, 1941/1940	Group 4, 1939/1938	Group 5, 1937/1936	Group 6, 1935/1934	Total	Percentage
Children Examined			999	2,099	1,885	1,681	1,022	415	62	8,163	—
Nutritional State: U.K. Board of Education Classification		A	63	179	192	284	248	152	31	1,149	13·6
		B (+B+)	629	1,412	1,297	1,137	657	244	30	5,406	66·4
		C (+B−)	300	501	387	258	114	19	1	1,580	19·6
		D	7	7	9	2	3	—	—	28	0·4
Skin Diseases			30	48	46	50	32	18	4	228	2·8
Scalp			7	18	12	20	17	9	—	83	1·0
Dental Defects			101	211	188	122	92	46	5	765	9·4
E.N.T.:											
Tonsils and Adenoids	(1)	Removed previously	182	573	617	697	471	190	32	2,762	33·8
	(2)	Enlarged	41	115	92	53	20	4	—	325	4·0
	(3)	Removal advised	16	40	22	21	3	—	—	102	1·2
Nose			94	152	113	55	5	2	—	421	5·2
Ears:											
Wax, Otitis Media, etc.			57	119	103	84	61	33	2	459	5·6
Defective hearing—slight			10	15	24	22	7	1	—	79	1·0
Defective hearing—marked			2	—	2	1	1	1	—	7	0·1
Speech Defects			7	15	9	12	2	2	—	47	0·6
Eyes:											
Squint			11	26	13	16	5	6	—	77	0·9
Other conditions			22	37	55	40	37	13	1	205	2·5
Vision:											
Refractive Defects	(1)	For observation	8	158	222	133	71	27	5	624	7·6
	(2)	Requiring glasses	3	65	83	90	54	20	1	316	3·9
	(3)	Having glasses	6	30	46	72	46	25	2	227	2·8
Other defects			—	4	3	3	4	—	—	14	0·1
Heart:											
Functional Disorders			4	29	11	14	10	—	—	68	0·8
Organic Diseases	(1)	Rheumatic	—	3	1	3	5	2	—	14	0·2
	(2)	Other	4	11	9	2	3	2	—	31	0·4
Lungs:											
Asthma			2	8	3	2	3	3	—	21	0·2
Bronchitis, Other			41	12	36	22	17	4	1	183	2·3
Abdomen:											
Enlarged spleen			1	4	5	2	3	—	—	15	0·2
Other			1	9	8	6	13	2	—	39	0·4
Nervous System:											
Functional Disorders			5	9	5	4	1	1	—	25	0·3
Organic Diseases			4	12	8	10	3	3	1	41	0·5
Posture Defects:											
Spinal			62	179	239	285	170	61	4	1,000	12·2
Spinal and Flat Feet			56	189	222	178	97	26	2	770	9·4
Flat Feet			136	270	281	254	121	38	6	1,106	13·5
Deformities:											
Head, Neck, Arms			—	1	6	3	2	—	—	12	0·2
Spine, Chest			10	26	12	20	6	3	—	77	0·9
Hips, Legs, Feet			159	255	201	170	107	34	1	927	11·4
Other Conditions			40	61	57	50	24	15	3	250	3·1

COLOURED AND INDIAN SCHOOLS: FINDINGS OF MEDICAL INSPECTION, 1952.

Routine Medical Examinations Children Born			Group 0, 1946	Group 1, 1945/1944	Group 2, 1943/1942	Group 3, 1941/1940	Group 4, 1939/1938	Group 5, 1937/1936	Group 6, 1935/1934	Total	Percentage
Children Examined			162	244	326	255	241	155	34	1,417	—
Nutrition State: U.K. Board of Education Classification	A		—	3	8	14	32	38	15	110	7·8
	B		53	80	143	125	145	98	19	663	46·7
	C		99	147	159	109	62	18	—	594	42·0
	D		10	14	16	7	2	1	—	50	3·5
Skin Diseases			14	12	7	6	5	4	3	51	3·6
Scalp			13	21	33	38	27	10	1	143	10·1
Dental Defects			7	36	31	22	17	21	5	139	9·8
E.N.T.:											
Tonsils and Adenoids	(1)	Removed previously	2	7	13	18	18	17	1	76	5·4
	(2)	Enlarged	5	7	23	11	18	5	—	69	4·9
	(3)	Removal advised	1	3	2	3	5	1	—	15	1·1
Nose			10	11	10	3	5	2	—	41	2·9
Ears:											
Wax, Otitis Media, etc.			9	22	40	21	28	16	4	140	9·8
Defective hearing—slight			—	6	4	6	4	3	3	26	1·8
Defective hearing—marked			—	—	—	—	—	—	—	—	—
Speech Defects			—	—	—	—	—	—	—	—	—
Eyes:											
Squint			1	2	1	—	1	—	—	—	0·35
Other conditions			2	3	4	4	1	4	—	18	1·3
Vision:											
Refractive Defects	(1)	For observation	—	6	20	23	15	8	5	77	5·4
	(2)	Having glasses	—	—	1	2	5	6	1	15	1·1
	(3)	Requiring glasses	—	1	5	7	14	5	1	33	2·3
Other Defects			—	—	—	1	—	—	—	1	0·07
Heart:											
Functional Disorders			1	2	—	—	5	1	1	10	0·7
Organic Diseases	(1)	Rheumatic	—	—	—	—	1	—	1	2	0·14
	(2)	Other	1	1	1	3	2	1	—	9	0·6
Lungs:											
Asthma			—	—	—	—	—	—	—	—	—
Bronchitis, Other			5	2	6	3	3	—	—	19	1·3
Abdomen:											
Enlarged Spleen			—	2	8	2	3	4	—	19	1·3
Other			—	1	4	2	3	1	—	11	0·8
Nervous System:											
Functional Disorders			—	—	—	—	—	—	—	—	—
Organic Diseases			1	—	2	—	—	—	—	3	0·2
Posture Defects:											
Spinal			11	30	47	32	31	15	1	167	11·8
Spinal and Flat Feet			4	11	29	32	19	6	—	99	7·0
Flat Feet			5	5	15	23	24	19	3	94	6·7
Deformities:											
Head, Neck, Arms			—	—	1	—	—	—	—	1	0·07
Spine, Chest			1	6	1	3	2	—	—	13	0·9
Hips, Legs, Feet			15	13	27	31	20	25	—	131	9·3
Other conditions			9	9	14	9	9	2	—	52	3·7

REPORT OF PUBLIC HEALTH LABORATORY, SALISBURY.

	European	*Non-European*	*Total*
BLOOD			
Microscopical—			
Blood counts, etc.	7,810	4,545	12,355
Blood films for parasites	2,656	3,454	6,110
Positive Findings:			
P. falciparum	319	460	
P. vivax	1	1	
P. malariae	1	2	
Trypanosomes	—	6	
Filaria	—	2	
Spirochaetes	—	10	
Cultural—			
Blood cultures performed	145	346	491
Positive Findings:			
Salmonella Group	9	17	
Other organisms	7	43	
Serological—			
Agglutination Tests	812	897	1,709
Positive Findings:			
Salmonella Group	81	195	
Brucella Group	122	37	
Other Organisms	8	3	
Serological Tests for Syphilis	1,218	34,303	35,521
Gonococcal Complement Fixation Tests	2	1	3
Grouping—Landsteiner	447	422	869
Grouping—Rhesus	764	5	769
Biochemical—			
Estimations performed	693	942	1,635
Miscellaneous—			
Sedimentation Rates, Fragility curves, Spectroscopic Examinations etc.	1,023	508	1,531
URINE			
Chemical Examinations	2,438	856	3,294
Centrifuged Deposits Examined	8,090	9,819	17,909
Positive Findings:			
S. haematobium	247	2,732	
S. mansoni	1	5	
Miscellaneous parasites	7	7	
Centrifuged Deposits Cultured	818	261	1,079
Salmonella Group	1	2	
Other Organisms	232	27	
Miscellaneous Examinations	59	47	106
SPUTUM			
Miscroscopical—			
Unstained Preparations Examined	1	—	1
Stained Films Examined	805	1,295	2,100
Bacteriological—			
Specimens Cultured	20	8	28
FAECES			
Direct or Concentrated Films	4,461	8,519	12,980
Positive Findings:			
S. mansoni	45	560	
S. haematobium	6	35	
E. histolytica-trophozoites	13	26	
E. histolytica-cysts	1	1	
Miscellaneous parasites	167	898	
Bacteriological—			
Specimens Cultured	301	268	569
Chemical—			
Estimations or Tests performed	116	24	140

	European	*Non-European*	*Total*
CEREBRO-SPINAL FLUID			
Routine Chemical Examinations	333	1,505	1,838
Routine Bacteriological Examinations	231	1,082	1,313
Streptococcus	7	25	
Neisseria	2	39	
Wassermann Reactions	24	231	255
PUS, EXUDATES, PUNCTURE FLUIDS			
Microscopic—			
Examinations performed	814	1,264	2,078
Culture—			
Specimens Cultured	1,099	738	1,837
Bacteria	299	205	
Fungi	160	—	
Chemical—			
Qualitative or Quantitative Examinations Performed	6	48	54
AUTOGENOUS VACCINES			
Number prepared	11	—	11
ANIMAL INOCULATIONS			
Friedman Test	127	1	128
Virulence Tests	7	9	16
C. diptheriae	1	—	
MISCELLANEOUS			
Watsr Samples Examined			150
Fractional Test Meals	114	9	123
Glucose Tolerance Curves	14	2	16
Government Analyst—Specimens to	51	65	116
Chemical Tests for Pregnancy—Kapeller Adler	237	8	245
Hospital Sterilisers			25
Ice Cream Samples Examined			13
Milk Samples Examined			29
Sensitivity Tests Performed	62	21	83
MEDICO-LEGAL EXAMINATIONS			
Smears for Spermatozoa, blood groups, etc.	11	99	110
HISTOLOGICAL EXAMINATIONS			
Post-Mortem Examinations	30	574	604
Post-Mortem Histology	2	136	138
Phthisis Bureau Histology	1	92	93
Surgical Histology	748	635	1,383
TOTAL EXAMINATIONS PERFORMED			109,857

UMTALI LABORATORY

	European	*Non-European*	*Total*
BLOOD			
Microscopical—			
Blood Counts, etc.	2,140	733	2,873
Blood Films for Parasites	875	1,336	2,211
Positive Findings:			
P. falciparum	143	453	
P. vivax	4	5	
Cultural—			
Blood Cultures Performed	12	12	24
Serological—			
Agglutination Tests	72	176	248
Grouping—Landsteiner	48	120	168
Biochemical—			
Estimations Performed	123	115	238
Miscellaneous—			
Sedimentation Rates, Fragility curves, Spectroscopic Examinations, etc.	206	120	326

	European	*Non-European*	*Total*
URINE			
Chemical Examinations	892	315	1,207
Centrifuged Deposits Examined	2,143	5,557	7,700
Positive Findings:			
S. haematobium	29	940	
Centrifuged Deposits Cultured	95	54	149
SPUTUM			
Microscopical—			
Stained Films Examined	94	434	528
FAECES			
Direct or Concentrated Films Examined	776	5,544	6,320
Chemical—			
Estimations or Tests Performed	13	—	13
Positive Findings:			
S. mansoni	8	235	
E. histolytica—trophozoites	2	4	
Miscellaneous Parasites	22	680	
Bacteriological—			
Specimens Cultured	26	41	67
CEREBRO-SPINAL FLUID			
Routine Chemical Examinations	21	30	51
Routine Bacteriological	20	76	96
Streptococci	—	5	
Neisseria	—	9	
PUS, EXUDATES, PUNCTURE FLUIDS			
Microscopical—			
Examinations Performed	80	97	177
Cultural—			
Specimens Cultured	56	121	177
MISCELLANEOUS			
Fractional Test Meals	30	—	30
Glucose Tolerance Curves	4	1	5
TOTAL EXAMINATIONS PERFORMED			22,648

REPORT OF PUBLIC HEALTH LABORATORY, BULAWAYO

	European	*Non-European*	*Total*
BLOOD			
Microscopical—			
Blood Counts	13,210	3,595	16,805
Blood Films for Parasites	2,389	2,679	5,068
P. falciparum	48	333	—
P. vivax	—	2	—
P. malariae	2	2	—
Filaria	2	10	—
Spirochaetes	—	8	—
Cultural—			
Blood Cultures Performed	170	420	590
Salmonella Group	—	6	—
Other Organisms	3	4	—
Serological—			
Agglutination Tests	608	1,610	2,218
Salmonella Group	10	67	—
Brucella Group	6	1	—
Serological Tests for Syphilis	1,315	24,773	26,088
Grouping—Landsteiner	742	232	974
Grouping—Rhesus	407	—	407
Compatibility Tests	232	—	232
Coombs Tests	140	—	140
Antibody Titrations	138	—	138
Biochemical—			
Estimations Performed	1,492	359	1,851
Miscellaneous—			
Sedimentation Rates, Fragility Curves, Spectroscopic Examinations	835	625	1,460
URINE			
Chemical Examinations	2,843	5,132	7,975
Centrifuged Deposits Examined	4,730	6,012	10,742
Centrifuged Deposits Cultured	1,750	749	2,499
Miscellaneous Examinations	13	—	13
SPUTUM			
Microscopical—			
Unstained Preparations Examined	64	6	70
Stained Films Examined	734	4,438	5,172
Bacteriological—			
Specimens Cultured	69	32	101
FAECES			
Direct or Concentrated Films	4,021	2,793	6,814
B. mansoni	2	8	—
E. histolytica (trophozoites)	26	24	—
E. histolytica (cysts)	50	10	—
Other Parasites	133	300	—
Bacteriological—			
Specimens Cultured	1,031	2,540	3,571
Salmonella Organisms	1	3	—
Shigella Organisms	8	1	—
Chemical—			
Estimations or Tests Performed	37	2	39
CEREBRO-SPINAL FLUID			
Routine Chemical Examinations	163	715	878
Routine Bacteriological Examinations	65	144	209
Neisseria	4	38	—
Strept pneumoniae	—	3	—
H. infiuenzae	2	4	—
Torula histolytica	1	—	—
Wasserman reactions	76	269	345

Pus, Exudates, Puncture Fluids, etc.

Microscopical—			
Examinations Performed	522	463	985
Cultural—			
Specimens Cultured—Bacteria	840	971	1,811
Specimens Cultured—Fungi	33	12	45
Chemical—			
Qualitive or Quantitative Estimations Performed	41	74	115

Autogenous Vaccines

Number Prepared	25	—	25

Animal Inoculations

Virulence Tests—			
Myco tuberculosis	9	3	12

Post-Mortem Examinations

Number Performed	25	—	25

Histological Examinations

Sections Examined	1,288	670	1,958

Medico-Legal Examinations

Examinations for spermotozoa, blood stains, etc	—	—	243

Miscellaneous Tests

Fractional Test Meals	92	1	93
Seminal Fluid Assay	53	—	53
Malignant Cells in Smears, etc.	47	6	53
Antibiotic Sensitivity Tests	285	35	320
Water Analysis—Bacteriological			405
Milk Analysis—Phosphatase Test			47
Total Examinations Performed	40,534	59,360	100,589

GWELO LABORATORY

Blood

	European	*Non-European*	*Total*
Microscopical—			
Blood Counts, etc.	1,394	113	1,507
Blood Films for Parasites	150	182	332
P. Falciparum	11	53	—
P. Vivax	—	—	—
Culture—			
Blood Cultures Performed	36	11	47
Salmonella Group	2	—	—
Brucella	—	—	—
Other Organisms	1	3	—
Serological—			
Agglutination Tests	62	33	95
Salmonella Group	6	5	—
Brucella	1	—	—
Other Organisms	—	—	—
Serological Tests for Syphilis	150	4,388	4,538
Positive Reaction	97	2,084	—
Grouping—Landsteiner	65	13	78
Biochemical—			
Estimations Performed	99	8	107
Miscellaneous—			
Sedimentation Rates	94	37	131
Glucose Tolerance Test	11	—	11
Rhesus Investigations	11	—	11

	European	*Non-European*	*Total*
URINES			
Chemical Examinations	387	124	511
Centrifuged Deposits Examined	669	965	1,634
Centrifuged Deposits Cultured	137	37	174
Miscellaneous Examinations	11	1	12
S. Haemotobium	6	304	—
Salmonella Group	—	3	—
SPUTUM			
Microscopical—			
Stained Films Examined	87	850	937
Bacteriological—			
Specimens Cultured	45	1	46
FAECES			
Direct or Concentrated Films	1,066	847	1,913
S. Mansoni	—	3	—
E. H. Trophozoites	47	30	—
E. H. Cysts	51	55	—
Miscellaneous Findings	54	162	—
Bacteriological—			
Specimens Cultured	105	58	163
Salmonella Organisms Isolated	3	5	—
Shigella Organisms Isolated	4	—	—
Miscellaneous Findings	4	4	—
Chemical—			
Estimations or Tests Performed	30	1	31
CEREBRO-SPINAL FLUID			
Routine Chemical Examination	65	66	131
Routine Bacteriological Examination	11	27	38
Streptococcus (*Pneumoniae*)	—	—	—
Neisseria	—	1	—
Khan Reactions Performed	15	14	29
Positive Reactions	1	3	—
PUS, EXUDATES, PUNCTURE FLUIDS, ETC.			
Microscopical—			
Examinations Performed	119	39	158
Cultural—			
Specimens Cultured	116	79	195
Qualitative or Quantitative Examinations	15	—	15
MEDICO-LEGAL EXAMINATIONS			
Smears for Spermatozoa, Blood Group, etc.	2	—	—
Tests for Arsenic, etc., on various specimens	5	—	7
MISCELLANEOUS TESTS			
Water (Presumptive Coli Count)	12	—	12
Bacteriological Examination for Pathogens, etc.	4	—	4
Milk (Full Bacteriology and Coli Count)	4	—	4
Pregnancy Test	10	—	10
Semen Analysis	3	—	3
Fractional Test Meals	26	—	26
Sensitivity to Antibiotics	32	1	33
Autogenous Vaccines Prepared	10	—	10
Estimations Performed	—	—	—
TOTAL EXAMINATIONS PERFORMED	5,058	7,895	12,953

REPORT OF THE GOVERNMENT ANALYST

NUMERICAL SUMMARY AND ANALYSIS

Exhibits in connection with Criminal Investigation—		
For presence of poisons	513	
For presence of bloodstains and for blood grouping	89	
For presence of seminal stains	198	
Miscellaneous forensic exhibits (hairs, fibres, paint scrapings, etc.)	96	896
Samples of Water—		
Private domestic supplies from boreholes, wells, rivers, springs and mine-shafts	50	
Government establishments, schools, camps, etc.	26	
Township supplies, existing and proposed	40	
Community supplies, hotels, etc.	11	
Abnormal waters, for clarification, purification and softening	7	
Corrosive and ferruginous waters	20	
General Industrial supplies	6	
Mineral analysis for boiler waters	16	
For evidence of sewage pollution	2	
From Swimming Baths	12	
Spring waters	3	
Tests for copper after treatment against bilharzia	5	198
Cows' Milk—		
Official and routine samples for conformity to legal standards		215
Dairy Produce—		
Butter, cheese, ice-cream, margarine		90
Customs Control—		
Excise samples, wines, liqueurs, spirits, etc.	16	
Miscellaneous samples for tariff classification	45	61
Illicit Liquors		22
Clinical—		
Various specimens, from Public Health Laboratories and private		184
Drugs and Chemicals examined for Medical Store		41
Maize Meal		40
Foodstuffs		157
Samples from Lloyds' Agents in connection with claims for damage		48
Miscellaneous		283
		2,235
plus Food Technology samples		21
		2,256

Owing to a decrease in major crime in the Colony during the year, there was an appreciable drop in the exhibits submitted by the Police for examination; this was particularly noticeable as regards bloodstains and toxicology.

Dairy produce samples, clinical specimens, foodstuffs and miscellaneous samples showed increases over the figures for 1951.

The total number of milks analysed was 215 of which 177 came from Salisbury (135 from the Medical Officer of Health and 42 from the Chief Dairy Officer); of the total analysed some 7½ per cent were well below standard.

64 Tins of dehydrated vegetables were submitted for check analyses at the request of the Ministry of Food in the United Kingdom; these vegetables were of excellent quality.

APPENDIX O.

REPORT OF THE RESEARCH LABORATORY

There have been various staff changes throughout the year. Mr. S. Gorman, who had particularly interested himself in the molluscan vectors of bilharziasis, and their cercarial output, retired from the Service in April. News of his death in Durban later in the year was received with deep regret.

Bilharzia and Malaria Control Units.

The number of units operating in North Mashonaland Reserves has been increased during the year to six and it has been found possible to place two units in Mtoko Reserve, which could not be completed in the 1951-52 programme. Work has gone steadily on in the current malaria season, and has not suffered the interruptions through weather conditions that were a feature of last year's work.

It should, however, be noted that some of the native inhabitants of the reserves are showing less interest and co-operation in our work of applying B.H.C. to huts. Some of this apathy, or worse, is due to the frailties of human nature—the novelty has worn off, and some is due to misconceptions regarding the true purpose of residual-insecticide spraying. The dramatic mass-slaughter of innumerable cockroaches is no longer a feature of the spray application, not because the insecticide is ineffective, but because there has not been time or opportunity for gross reinfestation and the African is not particularly interested in the death of mosquitoes which is much more important to his health. It must also be said that he is not particularly interested in anything that causes him the slightest inconvenience, such as being present at his kraal to open his hut at a given time, whatever benefits he may derive. Nevertheless, it is evident that the spraying continues to be effective, the experience last year in the Mangwende-Uzumba area clearly demonstrates this. Large numbers of malaria cases, with several deaths, occurred in the Uzumba reserve during the malaria season, when, of course, Uzumba was not part of the control area. Uzumba and Mangwende are contiguous, but practically no cases of primary malaria from Mangwende were seen by the Government Medical Officer, Mrewa. Similarly, a number of cases from the unsprayed Nyaderi area, which abuts on Mtoko Reserve were seen, while cases from the sprayed area in Mtoko Reserve were few.

Bilharziasis control by spraying rivers, streams and dams with copper sulphate solutions has continued throughout the remainder of the year and checking shows that large numbers of vector snails are destroyed with each application. Indeed in one small reserve—Bushu—it appeared from checking within a month of copper sulphating that a complete wiping-out of the snail population had been achieved. This eradication is an ideal unlikely of attainment in larger areas, but is an example of what may be done in a small circumscribed reserve.

Laboratory Activities.

We have continued to act as the Snail Identification Centre for Africa South of the Sahara, on behalf of the World Health Organisation, and in this connection we have received snails from many centres in Africa. A total of 17 collections has been examined and identifications made. A list follows at the end of the report showing the various species received. Planorbids have been sent to the three W.H.O. consultant malacologists for their opinions.

Among the interesting snails received were some presumptive *Physopsis nasuta* from Northern Rhodesia, it was not expected that this species would be found so far south, and of course it is important that its effectiveness as a carrier in this area be determined, since Schwetz has incriminated it as the vector of urinary bilharziasis in Uganda. Twenty-five collections of snails have been received from various parts of Southern Rhodesia, chiefly from Government Health Inspectors.

We have continued our own systematic collecting in Mashonaland and have in addition conducted surveys of certain areas. The whole riverine system meeting the main roads between Salisbury and Gwelo, and Gwelo-Fort Victoria-Salisbury has been surveyed during the year, and the results are now being assembled. It appears that a noteworthy change is taking place in the snail population in rivers round Salisbury, a change for the good as far as bilharziasis is concerned. Rivers which previously yielded large numbers of Physopsis snails now yield few, while the numbers of *Bulinus tropicus* have increased greatly, both relatively and actually. Breeding of snails in the laboratory indicates that Bulinus breeds better and faster than Physopsis under quasi-field conditions, and it may be that in a competition for survival in the field Bulinus is better able to adjust itself than is the vector snail Physopsis.

Work has gone on for years in this Laboratory on the relationship between *S. haematobium*, *S. bovis* and *S. mattheei*, and another step forward was taken this year. During the course of examining urine from patients in the Native Hospital, a female was found to be passing spindle-shaped eggs of the type we are accostomed to describing as *S. mattheei*. Miracidia from these eggs were used to infect Laboratory-bred *Physopsis africana* and cercariae were produced from two snails in six and a half weeks (45 days). The intraperitoneal inoculation of these cercariae into mice resulted in infections in which mature egg-laying worms resulted, and the strain has already been passaged through snails and again to mice. The adults and eggs are typical *B. mattheei*. Since we have never succeeded in obtaining mature egg-laying *B. haematobium* infections in our mice, it certainly appears that whatever name is given to this disease, it is not bilharziasis due to *S. haematobium* and infection of a human being by an animal schistosome would appear to have been conclusively demonstrated.

Another interesting case is now being studied. A native male juvenile was found to be passing eggs which conform to our classification of *S. bovis*, *S. mattheei* and *S. haematobium*, and several hundred eggs have been measured and drawn. Eggs of the three different shapes have been isolated, and *Physopsis spp.* snails exposed to miracidia from each.

On the other hand, attempts to produce infections with *S. mattheei* in European members of the Laboratory staff have failed, although very well-marked cercarial dermatitis was evident in each case. Presumably man is not a good host for *S. mattheei* or *S. bovis*, (Raper's experience in East Africa would seem to indicate this) and it may be that a very large number of cercariae is required to establish an infection. Judging by our experience of infected Physopsis in Mashonaland such large numbers are not infrequent in natural waters.

In furtherance of our studies of *S. mattheei* and *S. bovis*, we have for some time now been examining livers and intestines from cattle and sheep. Many of these tissues are infected, but the technical difficulties of obtaining live eggs from faeces from these animals are so great, that in spite of the world-wide opinion of workers in bilharziasis, we recently began to examine the urinary bladders of such animals, with the results discussed briefly below.

When Veglia and Le Roux published their description of *S. mattheei* as a parasite of cattle and sheep in South Africa, they admitted that they had been unable to consult Sonsino's original description of *S. bovis*. This fact was noted by McHattie *et al* in papers which decried not only the separate existence of this species, but also Blackie's incrimination of it as an occasional parasite of man in Southern Rhodesia. They produced references and evidence of their own to show that *S. bovia* is *never* found in the urogenital system of its natural hosts, which in Africa are cattle and sheep.

Their asseverations regarding the wholly intestinal nature of the infection in animals have not to my knowledge been contradicted, in medical literature at least, and specimens of urinary bladder from oxen slaughtered in the abattoirs of the Rhodesian Cold Storage Commission at Salisbury, are therefore of particular interest. They show lesions which are remarkably similar to those found in urinary bladders from humans infected with *S. haematobium* and the microscopic preparation derived from one of these lesions shows the presence of numbers of terminal spined eggs. A scraping made from the bladder wall also showed numerous eggs, which have been drawn and measured. They appear to be eggs of *S. bovis* and of *S. mattheei*. Altogether it may be said that incontrovertible evidence is here produced that *S. bovis* can cause bilharziasis of the urinary bladder in cattle in Southern Rhodesia

Trypanosomiasis.

As mentioned in last year's report, cases of sleeping sickness are being transferred to Salisbury for treatment, and their laboratory investigation is being carried out by the Research Laboratory.

Three early cases of *T. rhodesiense* infections have been diagnosed, one a European civil servant working at Kariba Gorge, and two were successfully treated with Pentamidine. The third case is still under treatment. Records of treatment of Rhodesian sleeping sickness with this drug appear to be few.

SNAILS RECEIVED BY W.H.O. SNAIL IDENTIFICATION CENTRE

Bulinus forskalii
Potamides sp.
Lanistes sp.
Melanoides sp.
Pila sp.
Physopsis sp.
Viviparus sp.
Lymnaea caillaudi
Planorbis ? pfeifferi
Segmentina kanisaensis
Physopsis africana
Physopsis nasuta
Lanistes carinus
Melanoides ? tuberculata
Bulinus sp.
Neritina
Planorbis gibbonsi ?
Physopsis globosa
Ancylus sp.
Lamellibranch
Assiminaea
Burnupia
Corbicula
Bulinus truncatus
Segmentinga ? augusta
Planorbis sudanicus
Planorbis boissyi
Trachycystis sp.
Oxychilus draparnaldi
Cleopatra bulimoides
Bulimus or *Gabbia sp.*
Planorbis smithii
Pseudancylus abyssinicus
Subulina
Trachycystis aprica
Pila ovata
Tomichia
Planorbula sp.
Planorbis rupellii
Zebrinops ventricosa